

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/31

Paper 3 Practical Test B

May/June 2016

MARK SCHEME
Maximum Mark: 80

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Task 1 – Evidence Document

This mark scheme includes the screenshots of the printed evidence that candidates should have included and screen shots from the Evidence Document.

Task 2 – Web Page

You are going to help some trainees develop web pages for The Manta Conservation Project. The first web page will be part of a website used to raise awareness of, and get donations for, conservation projects around the world.

No	Steps	Mark
1	Create a new folder called 1631_html	
2	Locate the following files and place them in your 1631_html folder	
	1631flags.pdf	
	1631img1.png	
	1631img2.png	
	1631img3.png	
	1631img4.png	
	1631img5.png	
	1631img6.png	
	1631img7.png	
	1631logo.png	
	1631maldives.htm	
	1631manta.htm	
	1631manta.jpg	
	1631manta1.tif	
	1631stylesheet.css	

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No		,	Steps	Mark
3	website. The style Open the styleshe The web page and	esheet was not fini eet 1631stylesheet d stylesheet must	igle stylesheet to be used with the ished and contains a number of errors. t.css in a suitable software package. work in any browser. All colour codes stylesheet contains no html.	[20]
	take Goldman	All gratimes solid Internal pricines I pleat that: External profines 2 pleats thick		
	Derplane Headen; Fill Gilden Pall:	All tremines collegesed So balle header debuils specified Med 30, Crearl 0, Cline III Red-CAL Crearl 0, Cline III Red-CAL Crearl 0, Cline III Red-CAL Colleges I and a set of services I and a set of services I and a set of services I and a service I and a service I and I		
	NF COOM Falls	Alignment centre Blue 85, Fied 33, Green 5 Aniel 15 points rept Alignment rops		
	p Other Fell	Red D, Green C, Else CR The browner's default same cent field 14 points right		
	Inde Salignant votes:	Augment Mr. Red 90, Green CC, Blue FF		
	followed by your of is 9999 then you v	candidate number	tml folder. Use the filename 1631st The For example, if your candidate number 31st9999.css	
	table			
	border-style:	solid	1 mark	
	border-width:	2px	1 mark	
	border-collapse:	collapse	1 mark	
	td			
	border-style:	solid	1 mark	
	border-width:	1px	1 mark	
	h1			
	color:	#330066	1 mark	
	font-family:	"Helvetica N		
		, Calibri	1 mark	
		, sans-serif;		
	font-size:	36pt	1 mark	
	text-align:	center	1 mark	
	h2			
	color:	#330099	1 mark	
	font-family:	Arial	1 mark	
	font-size:	18pt	1 mark	
	text-align:	right	1 mark	
	p			
	color:	#000008	1 mark	
	font-family:	sans-serif	1 mark	
	font-size:	14pt	1 mark	
	text-align:	left	1 mark	
	body background-color:	#99CCFF	1 mark	
	background-color.	#330077	I IIIdIN	

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No	Steps		Mark
4	Analyse the stylesheet started by the trainee a	nd evaluate its contents.	[4]
	Syntax of style name and { } correct 3 from:	1 mark 1 mark each point, max 3 marks	
	Number of styles missing from the stylesheet Style TH created but not required Syntax incorrect = should be a colon		
	4px not 4pixels	max 4 marks total	
5	Open the file j1631manta.htm using a suitable	software package.	[1]
	Attach the stylesheet saved in step 3 to this we	eb page.	
	Stylesheet attached to web page	1 mark	
6	Replace the text candidate name, Centre number, candidate number with your name, Centre number and candidate number.		[1]
	All correct	1 mark	
7	Replace the text Place logo here with the imag	e J1631logo.png	[2]
	Make sure that appropriate text is displayed if	this image is not available.	
	Correct insertion of logo in top left cell Appropriate alternate text displayed	1 mark 1 mark	
8	Make the image 1631logo.png a hyperlink to send an email message to tmcp@cie.org.uk with a subject line Tell me more		[5]
	"mailto: Anchor from 16313logo.png tmcp@cie.org.uk ?subject= Tell%20me%20more"	1 mark 1 mark 1 mark 1 mark 1 mark	

Page 5	Mark Scheme	Syllabus	Paper
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No	Steps		Mark
9	Select the most appropriate images from thos them to replace the following text: • Place flag of Fiji here • Place flag of Honduras here	e saved in Step 2 and use	[3]
	Place flag of Indonesia here Place flag of Moldivas here		
	Place flag of Maldives here.		
	You may use the file 1631flags.pdf to help you	l.	
	Resize each of these images to be 140 pixels vario.	wide, maintaining the aspect	
	Either:		
	4 correct insertions of image	2 marks	
	3 correct insertions of image 0, 1 or 2 correct insertions of image	1 marks 0 marks	
	Plus:	Ulliaiks	
	All 4 images resized to 140 pixels wide	1 marks	
10	Examine the file 1631manta1.tif. Explain in you this image is unsuitable for inclusion on the N you could do to enable it to be used.		[4]
	4 from:		
	Image size is too large for efficient download	1 mark	
	TIFF format cannot be used in all browsers	1 mark	
	Image needs converting to Bitmap graphic	1 mark 1 mark	
	Save with lower image resolution Image could be cropped	1 mark	
	Image could be reduced in size	1 mark	
11	Edit the file 1631manta1.tif to make it suitable	for a web page.	[4]
	Place this image in the web page 1631maldive text Place image 1631maldives here	s.htm so that it replaces the	
	File saved in .jpg, .jpeg or .png format	1 mark	
	Image resolution reduced during saving	1 mark	
	Image resized or cropped	1 mark	
	Image placed in web page	1 mark	
12	Attach the stylesheet saved in step 3 to this w	eb page.	[1]
	Stylesheet attached to web page	1 mark	
13	Replace the text candidate name, Centre number your name, Centre number and candidate number		[1]
10	All correct	1 mark	

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Task 3 – Spreadsheet

You are going to prepare a spreadsheet to manage the budgets and create charts comparing 6 global projects. Unless working in local currencies, display all currency values rounded to the nearest US dollar. The file **1631currency.csv** contains information about countries and their currencies. Make sure that you use the most efficient methods to do each task.

No	Steps	Mark
14	Using a suitable software package, load the file 1631sheet.csv	[1]
	Save this file as a spreadsheet with the filename 1631_ and your Centre number and candidate number. For example, 1631_ZZ999_9999	
	Insert 2 new rows above row 1.	
	Correctly inserted rows 1 mark	
15	In cell A1 enter the title TMCP Projects 2016	[1]
	In cell A2 enter your name, Centre number and candidate number.	
	TMCP Projects 2016 entered in A1 and candidate details in cell A2 1 mark	
16	Merge cells A1 to H1.	[4]
	 Format this cell so that: text is centre aligned with a white, 36 point, sans-serif font it has a black background colour. 	
	A1 to H1 merged 1 mark	
	sans-serif centre aligned font 1 mark white text, 36 point font 1 mark	
	black background colour 1 mark	
17	In cell B4 enter a function to look up, from the external file 1631currency.csv the name of the currency for Honduras.	[6]
	=VLOOKUP() 1 mark	
	B3 as relative reference 1 mark	
	External file '1631currency.csv' 1 mark	
	Correct range !\$A\$2:\$C\$183 with absolute referencing 1 mark	
	,3 1 mark ,False or ,0 1 mark	
18	In cell B5 enter a function to total the <i>Amount</i> of money in local currency for the Honduras project.	[4]
	=SUMIF() 1 mark Correct range \$B\$9:\$B\$198 with absolute referencing 1 mark ,B3 as relative reference 1 mark Correct range \$C\$9:\$C\$198 with absolute referencing 1 mark	

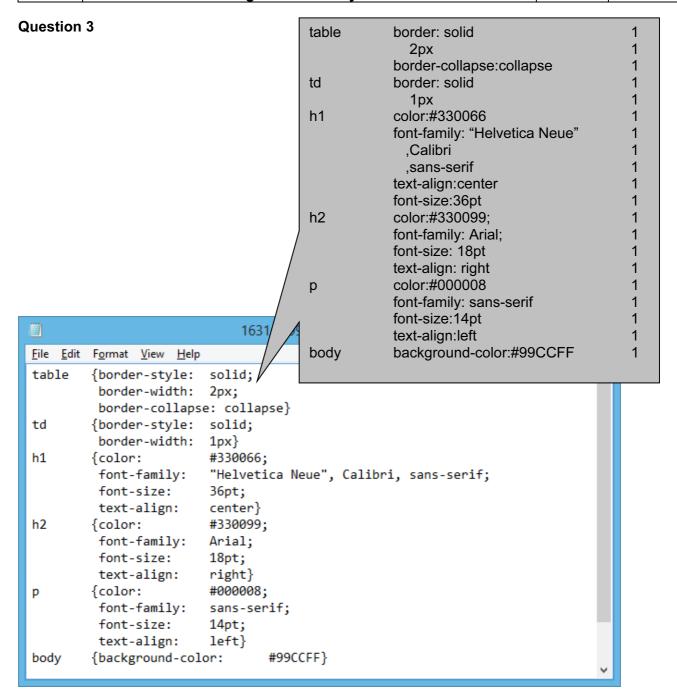
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No	Steps	Mark
19	In cell B6 enter a formula to look up, from the external file 1631currency.csv the exchange rate from the local currency to US dollars for Honduras. Multiply this value by total for the local currency, rounded to the nearest dollar.	
	=ROUND(,0) 1 mark VLOOKUP() 1 mark B3,'1631currency.csv'!\$A\$2:\$D\$183 1 mark ,4, False (or ,0) 1 mark *B5 1 mark	
20	Replicate the formulae entered in steps 17, 18 and 19 for each project.	[1]
	All 3 formulae replicated 1 mark	
21	In cell H6 enter a function to add the total income in US dollars.	[1]
	=SUM(B6:G6) 1 mark	
22	Sort the list of individual donations into ascending order of <i>Project</i> then descending order of <i>Amount</i>	[2]
	Sorted ascending by project 1 mark Then descending by Amount 1 mark	
23	Apply appropriate formatting to all cells in rows 3 to 6 inclusive.	[4]
	Formatting: All currency values right-aligned 1 mark US Dollars. \$ with 0dp 1 mark Fiji, Bermuda, Jamaica \$ with 2dp 1 mark Maldivian Rufiyaa :Rf, MRf, MVR, . or /- with 2dp Indonesian Rupiah: Rp or IDR with 2dp Honduras Lempira: L L. or HNL with 2dp 1 mark	
24	Save your spreadsheet.	[2]
	Print only the cells A1 to I6 showing the formulae. Make sure: it is in landscape orientation the row and column headings are displayed the contents of these cells are fully visible.	
	Landscape orientation and contents of A1 to I6 cells visible 1 mark	
	Row and column headings displayed 1 mark	
25	Print the spreadsheet showing the values. Make sure the: printout fits on a single page widecontents of all cells are fully visible.	[1]
	Printout fits on single page wide and contents of all cells are fully visible 1 mark	

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No	Step	S	Mark
26	Extract only the data for Fiji and the Mal donation was more than 90	dives, where the amount of the	[2]
	Print only this extract showing the values. Make sure the: printout fits on a single page wide contents of all cells are fully visible. 		
	Extract for Fiji and Maldives	1 mark	
	Amount > \$90	1 mark	
27	Save and print your Evidence Document	t	

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Question 4

Syntax of style name and { } correct 1 mark 3 from: 1 mark each point, max 3 marks Number of styles missing from the stylesheet Style TH created but not required Syntax incorrect = should be a colon 4px not 4pixels Evaluation 1 Syntax of style name and { } correct max 4 marks total 3 from: Styles missing from stylesheet Style TH created but not required Syntax incorrect = should be a colon 4px not 4pixels

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Question 9



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```
Stylesheet 1631st(cand no).css attached
                                                               1
<!DOCTYPE html>
<html><head><title>The Manta Conservation Project</title>
<link rel="stylesheet" type="text/css" href="1631st9999.css">
</head>
                                    Anchor from 1631logo.png
                            Hyperlink
<body><a id="top"></a>
                                    href="mailto:
                                                            1
<table style="spacing:2px;padd
                                    tmcp@cie.org.uk
  ?subject=
                                    Tell me more"
     <a
href="mailto:tmcp@cie.org.uk?subject=Tell%20me%20more">
<imq src="1631logo.png" alt="TMCP logo"></a>
     <td style="width:440px"
                           ∼lspan=3>
        <h1>The Manta Consert
                                Project</h1>
  <h1>Background</br>
</ra>
                               1631logo.png appropriate alt text
The Manta Conservation Project was set up to raise public awareness and
help fund conservation projects of the plight of these gentle giants of the
ocean. They are found in many diverse locations across the globe but for
the next few weeks we will be raining both awareness and funds for projects
in the following locations:
<imq src="1631manta.jpg" alt="Manta image"</pre>
width=320px>
     <h2>Support our project in:</h2>
  <t.d>
        <h2>Fiji</h2>
  <img src="1631img1.png" alt="Flag of Fiji" width=140px>
  4 images added
        <h2>Honduras</h2>
                                 All set to width=140px
                                                         1
     <imq src="1631imc
width=140px>
  <t.d>
        <h2>Indonesia</h2>
     <img src="1631img6.png" alt="Flag of Indonesia"
width=140px>
  <t.d>
        <h2>Maldives</h2>
     <img src="1631img4.png" alt="Flag of Maldives"
width=140px>
  Click on the flag to select/donate to the
project
```

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Mantas are found worldwide, in tropical and temperate waters. This area
includes South Africa, Madagascar, Somalia to Mozambique, Red Sea, Arabian
Sea, bay of Bengal, Myanmar(Burma), Indonesia, Thailand, Malaysia,
Philippines, Cambodia, Japan, northern Australia, Micronesia, New
Caledonia, Fiji, New Guinea, Solomon Islands, Hawaii, southern California
to northern Peru, North Carolina to Brazil, Senegal to Liberia and the
Azores.

<tr>Webpage last edited by A. Candidate, ZZ999, 9999

</body>

</html>

4 from:

Image size is too large
TIFF format not used in all web browsers
Needs converting to Bitmap graphic
Save with lower image resolution
Image could be cropped
Image could be reduced in size

Max 4

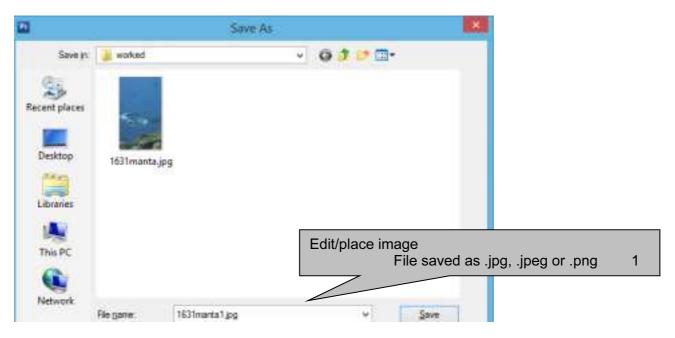
Question 10

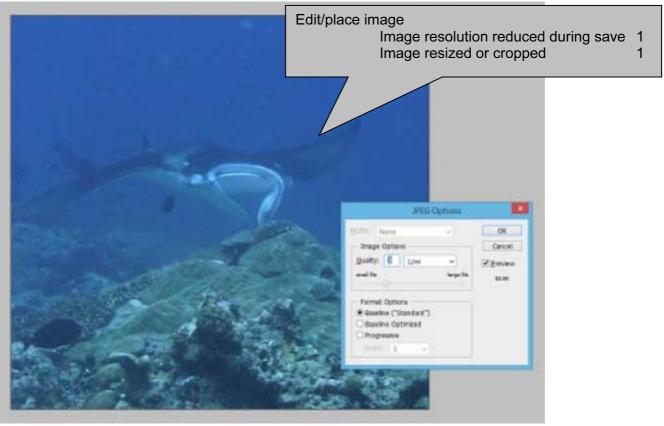
Answers containing Max [4] from:

Image size is too large for efficient download TIFF format cannot be used in all browsers Image needs converting to Bitmap graphic Save with lower image resolution Image could be cropped Image could be reduced in size

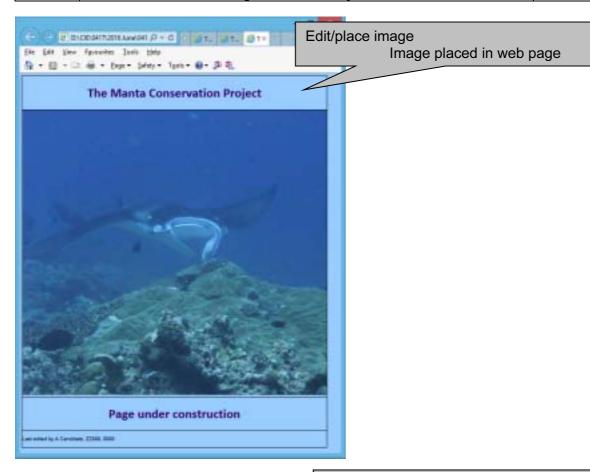
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Question 11





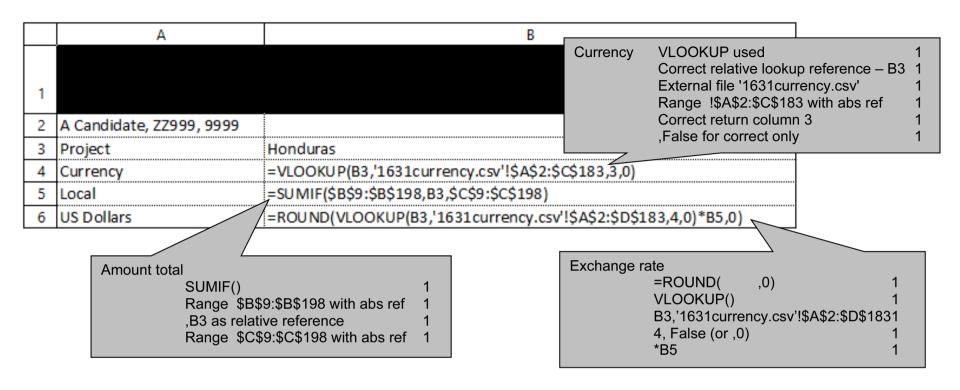
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```
Stylesheet attached to Maldives page 1
<!DOCTYPE html>
<html><head><title>The Manta Conservat
                                 Project</title>
<link rel="stylesheet" href="1631st9999.css">
</head>
<body>
<h1>The Manta Conservation Project</h1>
  <img src="1631maldives.jpg" alt="Manta in the
maldives">
  <h1>Page under construction</h1>
  Last edited by A Candidate, ZZ999, 9999
</body>
                          Candidate details
</html>
                                  Text replaced with candidate details 1
```

Attach stylesheet

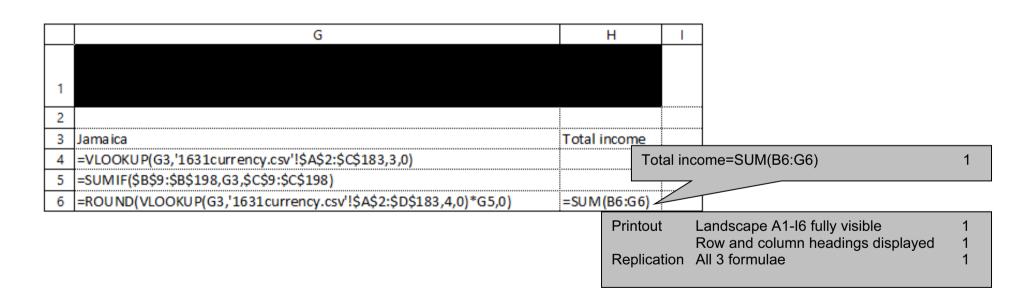
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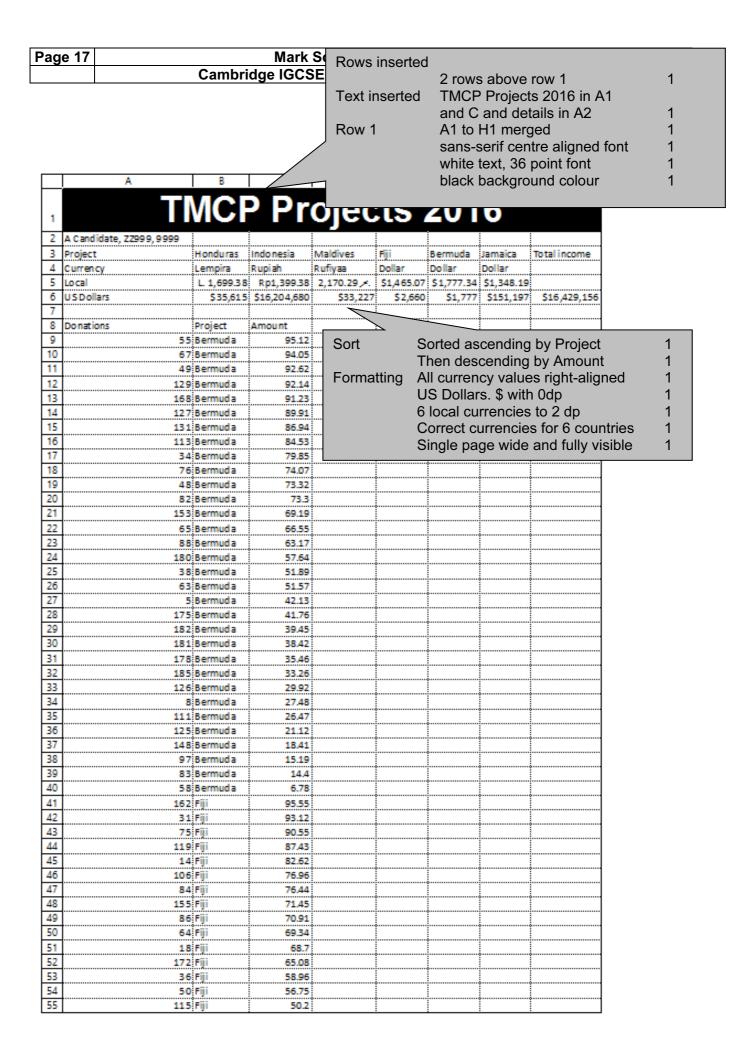


	С	D
1		TMCP Pro
2		
3	Indonesia	Maldives
4	=VLOOKUP(C3,'1631currency.csv'!\$A\$2:\$C\$183,3,0)	=VLOOKUP(D3,'1631currency.csv'!\$A\$2:\$C\$183,3,0)
5	=SUMIF(\$B\$9:\$B\$198,C3,\$C\$9:\$C\$198)	=SUMIF(\$B\$9:\$B\$198,D3,\$C\$9:\$C\$198)
6	=ROUND(VLOOKUP(C3,'1631currency.csv'!\$A\$2:\$D\$183,4,0)*C5,0)	=ROUND(VLOOKUP(D3, '1631 currency.csv'!\$A\$2:\$D\$183,4,0)*D5,0)

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	E	F
1	jects 2016	
2		
3	Fiji	Bermuda
4	=VLOOKUP(E3,'1631currency.csv'!\$A\$2:\$C\$183,3,0)	=VLOOKUP(F3,'1631currency.csv'!\$A\$2:\$C\$183,3,0)
5	=SUMIF(\$B\$9:\$B\$198,E3,\$C\$9:\$C\$198)	=SUMIF(\$B\$9:\$B\$198,F3,\$C\$9:\$C\$198)
6	=ROUND(VLOOKUP(E3,'1631currency.csv'!\$A\$2:\$D\$183,4,0)*E5,0)	=ROUND(VLOOKUP(F3,'1631currency.csv'!\$A\$2:\$D\$183,4,0)*F5,0)





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	A	В	С	D	E	F	G	Н
56	96	Fiji	47.38					
57	145	Fiji	44.93					
58	145 94	Fiji	38.07					
59	59	Fiji	35.64					
60	3	Fiji	34.38					
61	73	Fiji	29.72					
62	160	Fiji	28.01					
63	160 13	Fiji	22.42					
64	118	Fiji	22.26					
65	77	Fiji	15.39					
66	4	Fiji	12.14					
67	101	Fiji	9.76					
68	121	Fiji	7.38					
69	122	Fiji	3.53					
70	15	Honduras	98.06					
71		Honduras	90.56					
72	29	Honduras	89.26					
73	21	Honduras	88.02					
74	112	Honduras	85.01					
75	40	Honduras	84.26					
76	110	Honduras	84.23					
77		Honduras	78.62					
78		Honduras	75.96					
79	158	Honduras	72.51					
80	163	Honduras	66.21					
81		Honduras	66.13					
82	132	Honduras	65.9					
83		Honduras	64.01					
84	32	Honduras	62.73					
85	150	Honduras	57.64					
86		Honduras	54.43					
87		Honduras	48.79					
88	25	Honduras	45.74					
89	184	Honduras	43.15					
90		Honduras	42.89					
91		Honduras	42.77					
92		Honduras	42.05					
93		Honduras	37.21		ļ			
94		Honduras	37.14					
95		Honduras	31.49					
96		Honduras	18.87					
97		Honduras	12.94		ļ		ļ	
98		Honduras	7.34					
99		Honduras	3.85					
100		Honduras	1.61				<u></u>	
101 102		Indonesia	99.34					
102		Indonesia	89.56					
103		Indonesia	87.01					
104		Indonesia Indonesia	84.84					
105		Indonesia Indonesia	83.25					
107		Indonesia Indonesia	82.55					
108		Indonesia Indonesia	80.25 77.96					
109		Indonesia Indonesia						
110		Indonesia Indonesia	72.59					
111	173	Indonesia	71.97				<u></u>	
112		Indonesia	70.35					
112	159	Indonesia	66.02		:		:	

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	A	В	С	D	E	F	G	Н
113	51	Indo nesia	61.67					
114	102	Indo nesia	58.23					
115	177	Indonesia	52.95					
116	144	Indonesia	47.04					
117	43	Indo nesia	30.26					
118	176	Indo nesia	29.19					
119	138	Indo nesia	28.15					
120	166	Indo nesia	21.92					
121	104	Indo posia	21.04					
122	137	Indonesia Indonesia Indonesia	20.15		······································			
123	165	Indonesia	19.27					
124	79	Indonesia	19.21					
125	105	Indo nesia	16.32					
126	123	Indonesia	8.29					
127	11	Jamaica	99.2					
128	130	Jamaica Jamaica	95.06					
129	87	Jamaica	91.43					
130	186	Lamaica	91.42					
131	133	Jamaica	83.69					•
132	114	Jamaica	83.6					
133	147	Jamaica	83		•			
134	90	Jamaica	74.46					
135		Jamaica	65.3					
136		Jamaica	59.49					
137	35	Jamaica	58.2					
138	179	Jamaica	48.3					
139	164	Jamaica	46.3					
140	12.4	Jamaica	46.26					
141			42.2					
142	52	Jamaica Jamaica	38.31					
143	71	Jamaica Jamaica						
144	L	Jamaica	38.27 34.23					
145		Jamaica	28.2					
146	12	Jamaica	26.39					
147	117	Iamaica	ò					
148	217	Jamaica Jamaica	19.35					
149		Jamaica Jamaica	14.36 13.94					
150		Jamaica Jamaica	12.67					
151		Jamaica	11.81					
152			9.91					
153		Jamaica Jamaica	9.52					
154		Jamaica Jamaica	9.32 8.29					
155		Jamaica	8.06					i
								
156 157		Jamaica Maldivos	6.97		: 			: • !
158		Maldives	99.23					
158		Maldives	97.38					
		Maldives	92.03					
160		Maldives	91.08					
161	92	Maldives	90.1					
162		Maldives	90					
163		Maldives	88.37					
164		Maldives	87.48					
165		Maldives	81.55					
166		Maldives	80.88					
167	45	Maldives	78.9					
168	143	Maldives	77.81					
169	24	Maldives	75.25					

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	A	В	С	D	E	F	G	Н
170	7	Maldives	74.81					
171	108	Maldives	70.87			•		
172	170	Maldives	70.65					
173	98	Maldives Maldives	70.65 66.12			•		
174	69	Maldives	65.14				•	
175	120	Maldives	63.87			•		
176	99	Maldives	52.1					
177	68	Maldives	46.66					
178	128	Maldives	45.37					
179	33	Maldives	43.54				•	
180	16	Maldives Maldives Maldives	43.54 42.27					
181	10	Maldives	41.87					
182	161	Maldives	40.41					
183	70	Maldives	39.19					
184 185	156	Maldives	38.12					
185	74	Maldives	35.65					
186	19	Maldives	25.71					
187	61	Maldives	23.64					
188	42	Maldives Maldives Maldives	22.43					
189	89	Maldives	22.43 20.75 19.35					
190	188	Maldives	19.35					
191	17	Maldives	16 59					
192	157	Maldives	15.78 15.77					
193	37	Maldives	15.77					
194	146	Maldives	12.74					
195	149	Maldives	12.42					
196	39	Maldives	9.56					
197	30	Maldives	45					
198	57	Maldives	4.35			•		

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TMCP Projects 2016

A Candidate, ZZ999, 9999 Total Maldives Fiji Project Honduras Indonesia Bermuda Jamaica income Rupiah Rufiyaa Dollar Dollar Currency Lempira Dollar Local L. 1,699.38 Rp1,399.38 2,170.29 . \$1,465.07 \$1,777.34 \$1,348.19 **US Dollars** \$35,615 \$16,204,680 \$33,227 \$2,660 \$1,777 \$151,197 \$16,429,156 **Donations** Project Amount Extract 162 Fiji 95.55 Fiji and Maldives 31 Fiji 93.12 Amount > 90 75 Fiji 90.55 Maldives 107 99.23 Maldives 97.38 100 190 Maldives 92.03 62 Maldives 91.08 92 Maldives 90.1