

Selection

Mock Test

Grade 10

Information Technology

Download the data files at

<https://drive.google.com/drive/folders/18LQZZJ8UljGvxoXbMrEj6DdhPza9cTl8?usp=sharing>

Question 1

Load **Project1.DPR** in the **Q1** sub-folder:

This program takes as input two rugby scores for a Super 14 rugby match. These scores are entered into *spnT1* and *spnT2* spin edit controls. Complete the code for the *btnCalculate* button which must determine how many points each team will get for that match. The points are given as follows:

- The winning team will get 4 points
- The losing team will get 0 points
- If the game is a draw (both scores are the same) then each team will get 2 points
- If the LOSING TEAM lost by 7 or less points, the LOSING TEAM gets 1 *BONUS POINT*.

Examples			
Team 1's Score	Team 2's Score	Team 1's Points	Team 2's Points
36	12	4	0
20	26	1 (Bonus Point)	4
17	17	2	2

Question 2

Load **Project1.DPR** in the **Q2** sub-folder:

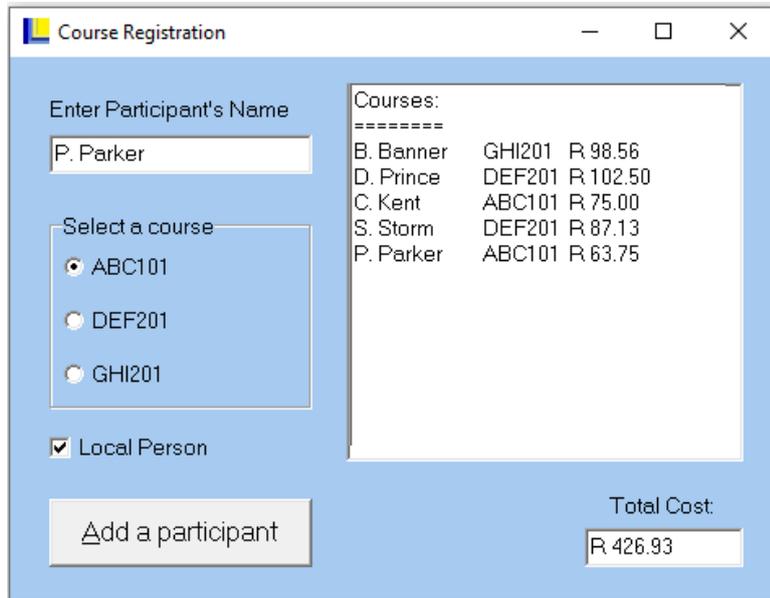
This program is designed to help the organisers of the workshop to keep track of the course costs. Participants can register in either one of the course listed below at the following rates:

ABC101	DEF201	GHI201
R 75.00	R 102.50	R 115.95

Complete the code for the onClick event handler for *btnAdd* button, which must do the following:

- Determine which course was selected, from the *rgpCourses* radio group and therefore determine which rate must be given according to the table given above.
- Determine if the entry is a local member or not, from the *cbxLocal* checkbox. If the participant is a local person then the entry fee will get a 15% discount. No discount is given if they are not local.
- A total of all the course fees must be calculated. Whenever a new participant has been entered, the total must be updated with the new total course fee. This value must be displayed in the *edtTotal* edit control.
- The participant's name, course and entry fee must be displayed in the *redOutput* component.

NOTE: Constants for the amounts representing the costs for the different courses have been declared for you.



Question 3

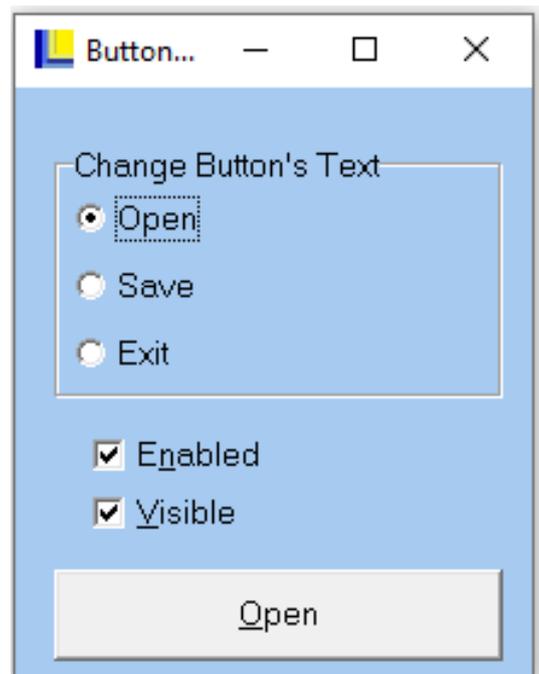
Load **Project1.DPR** in the **Q3** sub-folder:

- 3.1 When the user selects one of the options in the radio group **rgpButton**, the text that is displayed on the button must change to the text of the radio button. The first letter of the text of the button must also be underlined to indicate a short cut for the button.

For example: If the *Open* radio button is selected, then the caption of the button **btnButton** must display Open. If the *Save* radio button is selected, then the caption of the button **btnButton** must display Save, etc.

- 3.2 When the user selects the checkbox **cbxEnabled**, then the button **btnButton** must be enabled. If the user deselects the checkbox, then the button is disabled.

- 3.3 When the user selects the checkbox **cbxVisible**, then the button **btnButton** must be visible. If the user deselects the checkbox, then the button is invisible.



Question 4

Load **Project1.DPR** in the **Q4** sub-folder:

This program is used for Mr T Shirts Company and it gets the following information from the user:

- Number of Spongebob T Shirts wanted (from *spnSBTotal*)
- Number of Batman T Shirts wanted (from *spnBMTotal*)
- Cost of one Spongebob T Shirt (from *edtSBPrice*)
- Cost of one Batman T Shirt (from *edtBMPrice*)

NOTE: The input has been done for you.

When the user clicks on the **btnCalculate** button, the program must calculate the total price for the T Shirt order and display this value in the **edtTotal** edit control.

The T Shirt order is calculated as follows:

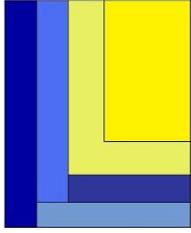
- If the order includes 5 or more Spongebob T shirts, they receive a 10% discount on the price of Spongebob T shirts.
- If the order includes more than 7 Batman T shirts, they receive an 8% discount on the price of Batman T shirts.
- If the order has more than 10 Spongebob T shirts and more than 10 Batman T shirts then they receive an extra 5% discount on the total order.



The total price must be displayed to two decimal places with the R symbol.

	<i>Example 1</i>	<i>Example 2</i>	<i>Example 3</i>
of Spongebob T shirts	3	5	11
Spongebob Price	45.50	45.50	45.50
# of Batman T shirts	2	7	11
Batman Price	50.00	50.00	50.00
Total Price	R236.50	R554.75	R908.63

Video answers to the above questions can be found on our  **YouTube** channel at



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Question 1: <https://youtu.be/0BwTstQ4L-Q>

Question 2: <https://youtu.be/tgznDJFr5x0>

Question 3: <https://youtu.be/kHAz2mObeHE>

Question 4: https://youtu.be/qUDnCli_H38