**Task 1 – Discount schema**

“DreamMarket” is a supermarket operating in your city. It uses progressive discount schema to attract more customers. The schema has the following rules:

* If amount payable is more than or equal to 10,000 sums and less than 20,000 sum – discount is 1%
* If amount payable is more than or equal to 20,000 sums and less than 35,000 sum – discount is 2%
* If amount payable is more than or equal to 35,000 sums and less than 60,000 sum – discount is 3%
* If amount payable is more than or equal to 60,000 sums – discount is 4%

However, recently “DreamMarket” has started new marketing company and distributed discount cards among its customers. Therefore, if a person has a discount card new rules are applied (instead of the rules listed above):

* If amount payable is more than or equal to 5,000 sums and less than 15,000 sum – discount is 1.5%
* If amount payable is more than or equal to 15,000 sums and less than 30,000 sum – discount is 2.5%
* If amount payable is more than or equal to 30,000 sums and less than 55,000 sum – discount is 3.5%
* If amount payable is more than or equal to 55,000 sums – discount is 4.5%

Your task is to write a program that will calculate discounted amount using the rules stated above.

The program should accept the amount payable via TextBox control and whether the client has discount card via CheckBox control. After that the program should calculate and display discounted amount via message box.

Be sure to check if the amount supplied is valid. If user input is invalid your program should notify the user by showing friendly message describing the error and then terminate.

**40 marks**

**Task 2 – Relay-race**

Imagine a relay-race competition where each team contains only two athletes. The time for each individual runner is recorded and your task is to calculate the total time for a team.

Your program should accept two time inputs in format of hh:mm via TextBox controls. After that you should calculate and display the total time for the pair.

For example:

* Time 1 is 02:45
* Time 2 is 02:50
* The result should be shown as “Total time is - 05:35”

User input should be validated. In case of invalid input is entered your program should show friendly message describing the error and terminate.

**60 marks**