|  |  |  |  |
| --- | --- | --- | --- |
| |  |  | | --- | --- | | Programming Concepts  Worksheet 5b - More Decision Making | Graphical user interface  Description automatically generated with medium confidence | |  |

1. Write a program to prompt the user to enter a positive number. A message must be displayed depending on whether the number is positive or not.

2. Write a program to simulate alogin functionality. Set the username and password as constants. Ask the user to enter the username and password (not hidden for now). If the username and password are correct display the msg: LoginSuccessful! , otherwise display the message Login Failed!

3. Write a program to check whether a student has passed an exam or not. The program must first validate whether the mark input is between 1 and 100. A message must be displayed depending on whether the student has passed or not. If the mark input is not within the required range, an error message must be displayed.

4. Develop a simple guessing game. The user is prompted to try to guess a number from 1 to 10. A message is displayed depending on whether the number is guessed or not.

5. Write a program to prompt the user to enter a number from 0 to 4. Use a switch() statement to display a message according to the following table:

|  |  |
| --- | --- |
| Input | Message |
| 0 | You selected Magenta |
| 1 | You selected Cyan |
| 2 | You selected Red |
| 3 | You selected Blue |
| 4 | You selected Green |
| other number | Invalid selection |

6. Write a program to generate a random number from 1 to 10. A message showing the prize on is displayed according to the following table:

|  |  |
| --- | --- |
| Number | Prize |
| 1, 2 or 3 | Ferrari |
| 4 | Ticket to Dublin |
| 5 | iPad |
| 6 | Robot |
| 7, 8, 9 or 10 | Dinner for two |