

Practice If-Else (Dated: 26-05-2021)

1. An online book club awards points to its customers based on the number of books purchased each month. Points are awarded as follows:

Books	Purchased Points Earned
0	0
1	5
2	15
3	30
4 or more	60

Write a program that asks the user to enter the number of books purchased this month and then displays the number of points awarded.

2. Scientists measure an object's mass in kilograms and its weight in newtons. If you know an object's mass, you can calculate its weight in newtons with the following formula:

$$\text{weight} = \text{mass} * 9.8$$

Write a program that asks the user to enter an object's mass, and then calculates and displays its weight. If the object weighs more than 1000 newtons, display a message indicating that it is too heavy. If the object weighs less than 10 newtons, display a message indicating that the object is too light.

3. Write a program that asks the user to enter a number of seconds:
 - There are 86400 seconds in a day. If the number of seconds entered by the user is greater than or equal to 86400, the program should display the number of days in that many seconds
 - There are 3600 seconds in an hour. If the number of seconds entered by the user is less than 86400, but is greater than or equal to 3600, the program should display the number of hours in that many seconds
 - There are 60 seconds in a minute. If the number of seconds entered by the user is less than 3600, but is greater than or equal to 60, the program should display the number of minutes in that many seconds

4. A bank charges \$10 per month plus the following check fees for a commercial checking account:

Rs. 10 each for fewer than 20 checks

Rs. 8 each for 20–39 checks

Rs. 6 each for 40–59 checks

Rs. 4 each for 60 or more checks

Write a program that asks for the number of checks written during the past month, then computes and displays the bank's fees for the month. **Input Validation: Do not accept a negative value for the number of checks written.**

5. Write a program that generates a random number between 1 and 100 and asks the user to guess what the number is. If the user's guess is higher than the random number, the program should display "Too high. Try again." If the user's guess is lower than the random number, the program should

display "Too low. Try again." The program should use a loop that repeats until the user correctly guesses the random number. Then the program should display "Congratulations. You figured out my number."