

Session-1 Lab

(Solve any two problems)

1. Write a program to enter P,T (principal and time) and calculate simple interest. Use the Scanner class for taking inputs from the console. Users will enter the principal amount and time(in years).

Create an if-else statement and modify the interest rate based on the principal amount. If the amount > 10000 then the interest rate is 10%. If the amount is between 10000 and 5000 then make the interest rate 8%. For any amount below 5000 the interest rate should be 5%.

2. Write a program to enter marks of five subjects and calculate total marks and average. Each subject has a full mark of 100. Give grades based on average marks. Grades should be Ex (>90%), A (>80%) , B(>60%) ,C (>=40%) and F(<40%). Use the Scanner class to take inputs from the console.

3. Write a program which calculates the monthly bill amount for a internet subscriber based on the following logic:

- 1) If the total data consumed is less than 10 GB then bill amount will be Rs. 300. (Basic charge)
- 2) If the data consumed is between 10 GB and 30 GB then bill amount will be basic charge + 5* (Total GB consumed - 10). That means consumers will be charged Rs 5 for each additional GB consumed over 10 GB.
- 3) If the consumer consumes more than 30 GB then
The bill amount = 400 + 3 *(Total GB consumed - 30).
That means the consumer has to pay additional Rs 3 for each GB above 30GB.
Use if-else block to solve the problem.