

Practice Problems on Branching

1. Write down a program that will take a number as input and will print its absolute value without using any library function. The absolute value of a number is the magnitude of it ignoring its sign. You can only use Ternary operator to solve this problem.
2. Write down a program that will take an integer as input and print **YES** if the number is divisible by 5 but not divisible by 7 and print **NO** otherwise.
3. Given a 3-digit number as input by the user find and print its minimum digit. For example if the user input is 361 the output is 1.
4. Write a program that takes an arithmetic operator ('+', '-', '*' or '/') and two operands as input and perform the corresponding arithmetic operation on the operands. **You must use switch-case to solve the problem.**
5. The marks to grade mapping in a certain university is as follows:

A : 80-100% B : 70-79%
C : 60-69% D : 50-59%
F : 0-50%

Write a C program that will take the grade as input and output the grade percentage.

Sample input	Sample output
A	80 – 100%
D	50 - 59%
X	Invalid grade

Hint: Using switch-case may result in cleaner code.

6. Electricity bill at a certain power distribution company is computed as follows:
First 50 units: BDT 4 per unit
Next 30 units: BDT 3 per unit
Next 20 units: BDT 2 per unit
Next any units: BDT 1 per unit

Write a C program that will take number of units used this month and calculate the bill in BDT.

Sample input	Sample output
102.5	BDT 332.5 Only
25.0	BDT 100.0 Only

