**Practice Problems on Branching**

Date: 31-12-2023

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.

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

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

1. 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.

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