

CSE 115: 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 C program that calculates the purchase amount after discount at the Agora shop. The discount rate depends on the purchase amount and summarized below:

| Purchase amount | Discount rate |
|------------------------|---------------|
| First 5,000 TK | 5% |
| Next 5,000 TK | 10% |
| Remaining above 10,000 | 20% |

5. 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.**
6. Write a C program to check whether a character given as input is an alphabet or not. If it is an alphabet, then it should also specify whether it is a vowel or a consonant.