

## Lab 6

### Conditional Statements in C

Marks: 6

**Question 01:**

Generate the following output:

```
TEMPERATURE CONVERSION

Press 1 to give temperature in Celsius and Press 2 to give
temperature in Fahrenheit
2
Enter temperature in Fahrenheit: 75.25 Temperature in Celsius is:
24.02
```

**Question 02:**

Calculate student's grade with respect to his/her percentage. Percentage will be provided by user. Grading criteria is as follows:

GRADE	PERCENTAGE
A+	80% or above
A	70% - 79%
B	60% - 69%
C	50% - 59%
D	40% - 49%
F	Below 40%

**Question 03:**

Write a program to take character input and check whether the input is Capital letter or small letter.

**Question 04:**

The body mass index (BMI) is the ratio of the weight of a person (in kilograms) to the square of the height (in meters). Write a program that takes two inputs, weight and height, computes the BMI, and prints the corresponding BMI category:

$$BMI = \frac{weight(lb) \times 703}{(height(in))^2}$$

- Starvation: less than 15
- Anorexic: less than 17.5
- Underweight: less than 18.5
- Ideal: greater than or equal to 18.5 but less than 25
- Overweight: greater than or equal to 25 but less than 30
- Obese: greater than or equal to 30 but less than 40
- Morbidly Obese: greater than or equal to 40

**Question 05:**

A) Write a program to input your age and your sister's age and then display who is older of the two.

```
Enter Your Age: 21
Enter Your Sister's Age: 19 You are older of
the two
```

B) Convert the following into equivalent if-else statement

```
x=(y<0)? printf("Negative"): printf("Positive");
```

**Question 06:**

Using IF and Switch statement, write a program that displays the following menu for the food items available to take order from the customer:

- B= Burger (Rs. 200)
- F= French Fries (Rs. 50)
- P= Pizza (Rs. 500)
- S= Sandwiches (Rs. 150)

The costumer can order any combination of available food. The program first asks to enter the no of types of snacks i.e. 2, 3 or 4 then it ask to enter the choice i.e. B for Burger and then for quantity. The program should finally display the total charges for the order.

## ABC Restaurant Online Order Placement

WELCOME!

Please select from the following Menu

B= Burger

F= French Fries

P= Pizza

S= Sandwiches

How many types of snacks you need to order: 2

Enter first Snack you want to order: B

Please provide quantity: 2

Enter second Snack you want to order: P

Please provide quantity: 3

-----  
You have ordered!

2 Burger (s) value 400 PKR

3 pizza (s) value 1500 PKR

Total: 1900 PKR

Thank you for your order... have a nice day.