ASSIGNMENT-1(C)

1. Write a program that uses goto to skip negative numbers and print only non-negative numbers entered by the user

```
#include <stdio.h>
int main() {
        int n;
        printf("How many numbers would you like to check? ");
        scanf("%d", &n);
        int num[n];

        printf("Enter %d numbers to print only positive numbers\n", n);
        for (int i = 0; i < n; i++) {
                scanf("%d", &num[i]);
        }

        int i = 0;
        Positivity:
        if (i < n) {
                if (num[i] >= 0) {
                        printf("%d\n", num[i]);
                }
                i++;
                goto Positivity;
        }
        return 0;
}
```

2. Write a program that prints numbers from 1 to 20, skipping multiples of 3.

```
#include <stdio.h>


int main(){
    for(int i = 1; i <= 20; i++){
        if(i%3 == 0){
            continue;
        } else{
            printf("%d\n", i);
        }
    }
    return 0;
}
```

3. Write a program that uses break to exit a loop when a user enters a specific number.

```
#include <stdio.h>


int main(){
    int n;
    while(1){
        printf("Enter 0 to exit: ");
        scanf("%d", &n);
        if(n ==0){
            break;
        }
    }
}
```

4. Write a program using switch to create a simple calculator that performs addition, subtraction, multiplication and division based on user input.

```
#include <stdio.h>

int main(){
    float a,b;
    char operator;
    printf("Enter first number: ");
    scanf("%f", &a);
    printf("Enter second number: ");
    scanf("%f", &b);
    printf("Enter operator(+,-,*,/): ");
    scanf(" %c", &operator);

    switch(operator){
        case '+':
            printf("Addition is: %.0f", a+b);
            break;
        case '-':
            printf("Subtraction is: %.0f", a-b);
            break;
        case '*':
            printf("Multiplication is: %.0f", a*b);
            break;
        case '/':
            if(b ==0){
                printf("Cannot divide by zero!");
            } else{
            printf("Division is: %.2f", a/b);
            }
            break;
        default:
            printf("Invalid operator");
    }
    return 0;
}
```