ASSIGNMENT-2

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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 num;
    while (1) {
        printf("Enter a number (or type -1 to exit): ");
        scanf("%d", &num);
        if (num < 0) {
            goto skip;  // Skip negative numbers
        }
        printf("%d\n", num);
                if (num == -1) {
            break;  // Exit if -1 is entered
        }
            skip:;  // Label for the goto statement
    }
```

```
    return 0;
}
```

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

```
#include <stdio.h>


int main() {
    for (int num = 1; num <= 20; num++) {
        if (num % 3 == 0) {
            continue;  // Skip multiples of 3
        }
        printf("%d\n", num);
    }

    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 num;
    while (1) {
        printf("Enter a number (or type 0 to exit): ");
        scanf("%d", &num);

        if (num == 0) {
            break;  // Exit the loop if 0 is entered
        }
        printf("You entered: %d\n", num);
    }

    return 0;
}
```

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() {
    int operation;
    float num1, num2;
    printf("Select operation:\n");
    printf("1. Addition\n");
    printf("2. Subtraction\n");
    printf("3. Multiplication\n");
    printf("4. Division\n");
    printf("Enter operation (1/2/3/4): ");
    scanf("%d", &operation);

    if (operation >= 1 && operation <= 4) {
        printf("Enter first number: ");
        scanf("%f", &num1);
        printf("Enter second number: ");
        scanf("%f", &num2);
        switch (operation) {
            case 1:
```

```
                printf("%.2f + %.2f = %.2f\n", num1, num2, num1
+ num2);

                Break;

            case 2:

                printf("%.2f - %.2f = %.2f\n", num1, num2, num1
- num2);

                Break;

            case 3:

                printf("%.2f * %.2f = %.2f\n", num1, num2, num1
* num2);

                Break;

            case 4:

                if (num2 != 0) {

                    printf("%.2f / %.2f = %.2f\n", num1, num2,
num1 / num2);

                } else {

                    printf("Error: Division by zero\n");

                }

                Break;

            Default:

                printf("Invalid operation\n");

        }
```

```
    } else {
        printf("Invalid operation\n");
    }

    return 0;
}
```