

# MAIRA EMAAN NASIR

REG NO: 2430-0153

## PROGRAMMING FUNDAMENTALS

ASSIGNMENT: TERNARY OPERATORS AND CONDITIONAL OPERATORS

TASK NO: 04

**QUESTION NO: 01** 

#### SIMPLE CALCULATOR:

#### CODE:

```
[] G & Share
                                                                                  Run
main.cpp
1 #include <iostream>
 2 using namespace std;
 3 * int main() {
 4
        double num_x, num_y,result;
 5
        char operation;
        cout<<"Enter the first number"<<"\n";</pre>
 6
 7
        cin >>num_x;
        cout<<"Enter the second number"<<"\n";</pre>
 8
 9
        cin >>num_y;
        cout<<"Enter the operations (+,-,*,/) :"<<"\n";</pre>
10
        cin >>operation;
11
12
        if (operation =='+')
13 -
        {
            cout<<"Result: "<<num_x + num_y <<"\n";</pre>
14
15
        }
        else if (operation =='-')
16
17 -
            cout<<"Result: "<<num_x - num_y <<"\n";</pre>
18
19
        }
        else if (operation =='*')
20
21 -
        {
22
            cout<<"Result: "<<num_x * num_y <<"\n";</pre>
23
        }
24
        else if (operation =='/')
25 -
        {
Z3 *
            cout<<"Result: "<<num_x / num_y <<"\n";</pre>
26
27
        }
        return 0;
28
29 }
```

#### **OUTPUT:**

```
Output

/tmp/D5wk7K9Qax.o
Enter the first number
6
Enter the second number
5
Enter the operations (+,-,*,/) :
*
Result: 30

=== Code Execution Successful ===
```

## **QUESTION: 02**

## CODE:

```
Share
                                                                        Run
main.cpp
1 #include <iostream>
 2 using namespace std;
 3 - int main() {
      int number;
      cout << "Enter a number: ";</pre>
     cin >> number;
 7 	 if (number > 0)
9 cout << "The number is positive.\n";</pre>
10 }
11 else
12 * {
13 cout << "The number is zero.\n";</pre>
14 }
15 return 0;
16 }
```

## **OUTPUT**:

```
Output

/tmp/YFTBmBmB5d.o

Enter a number: 99

The number is positive.

=== Code Execution Successful ===
```

**QUESTION: 03** 

## CHECK VOTING ELIGIBILITY

## CODE:

```
[] ← Share
                                                                       Run
main.cpp
1 #include <iostream>
2 using namespace std;
3 - int main() {
4
       int myAge = 19;
5 +
     if (myAge >= 18){
6
     cout<<"I am eligible to vote"<<"\n";</pre>
7
       }
8 = else {
       cout<<"I am not eligible to vote"<<"\n";</pre>
9
10
11
       return 0;
12 }
```

## **OUTPUT**:

```
Output

/tmp/ox8afC0De4.o
I am eligible to vote

=== Code Execution Successful ===
```

**QUESTION: 04** 

CODE:

```
[] ← C Share
                                                                        Run
main.cpp
1 #include <iostream>
2 using namespace std;
3 * int main() {
4 int num1;
 5
     int num2;
     cout<<"Enter two integers"<<"\n";</pre>
 6
 7 cin>>num1>>num2;
8
      if (num1>num2){
9 +
          cout<<"num1 is greater"<<"\n";</pre>
10
11
      }
12 -
      else {
          cout<<"num1 is less than num2"<<"\n";</pre>
13
14
15
       return 0;
16 }
```

## **OUTPUT:**

```
Output

/tmp/aE0iIH8hoK.o

Enter two integers
90, 50
num1 is greater

=== Code Execution Successful ===
```

**QUESTION: 05** 

GRADE CLASSIFICATION BASED ON MARKS

CODE:

```
[] ← Share
                                                                          Run
main.cpp
 1 #include <iostream>
 2 using namespace std;
 3 - int main() {
4 int marks;
     cout << "Enter your marks: ";</pre>
 5
     cin >> marks;
 7 * if (marks >= 90) {
 8 cout << "Grade: A\n";</pre>
 9 }
10 else if (marks \geq 75)
11 - {
12 cout << "Grade: B\n";</pre>
13 }
14 else if (marks >= 50)
15 - {
16 cout << "Grade: C\n";</pre>
17 }
18 - else {
19     cout << "Grade: F\n";</pre>
20 }
21 return 0;
22 }
```

## **OUTPUT:**

```
Output

/tmp/N7c00fhWQk.o
Enter your marks: 98
Grade: A

=== Code Execution Successful ===
```

**QUESTION: 06** 

PROBLEM: TRAFFIC LIGHT ACTION GUIDANCE

CODE:

```
[] G Share
                                                                                 Run
main.cpp
 1 #include <iostream>
 2 using namespace std;
 3 - int main() {
        string light;
 4
 5
        cout<<"Enter a light colour: ";</pre>
 6
        cin>>light;
 7 -
        if (light == "red"){
 8
        cout<<"Stop your vehicle.";</pre>
 9
10 -
        else if (light == "yellow"){
11
        cout<<"Get ready to move.";</pre>
12
13 -
        else if (light =="green"){
14
        cout<<"You can go.";</pre>
15
16 -
        else{
17
            cout<<"wrong input.";</pre>
18
19
        return 0;
20 }
```

## **OUTPUT:**

Result: 01

```
Output

/tmp/TBzZGZzMXY.o

Enter a light colour: red

Stop your vehicle.

=== Code Execution Successful ===
```

Result: 02

