

OOPs assignment 1

Submitted by: Mehma Kaur Chadha

Roll Number 1024150080

Batch:2o13

1. Q1 Write a program (WAP) to display "Hello World" on console display.

Code:

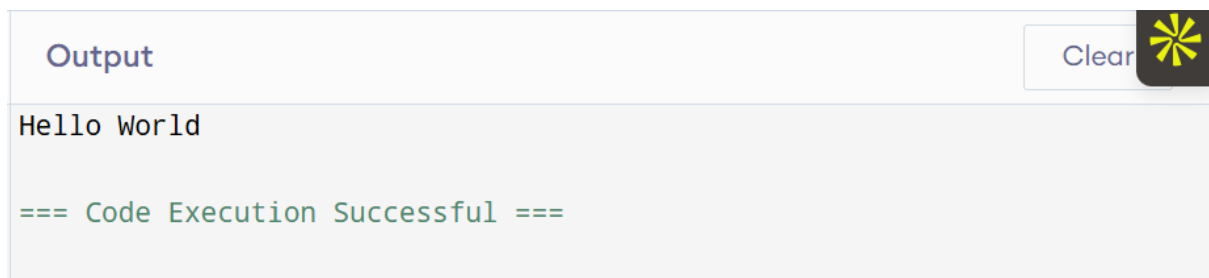
```
#include <iostream>

using namespace std;

int main(){
    cout<<"Hello World";

}
```

OUTPUT:



```
Output
Hello World

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

2. WAP to input an integer, decimal and character and display it.
CODE:

```
#include <iostream>
using namespace std;
int main() {
    int i;
    float d;
```

```

char c;
cout<<"enter an integer";
cin>>i;
cout<<"enter a decimal";
cin>>d;
cout<<"enter a character";
cin>>c;
cout<<"integer entered: "<<i;
cout<<"\ndecimal entered: "<<d;
cout<<"\ncharacter entered: "<<c;

}

```

OUTPUT:

Output

Clear

```

enter an integer1
enter a decimal1.2
enter a characterm
integer entered: 1
decimal entered: 1.2
character entered: m

=== Code Execution Successful ===

```

3. WAP to add, subtract, multiply, divide numbers.

CODE:

```

#include <iostream>
using namespace std;
int main(){
    int a,b;
    cout<<"enter first number";
    cin>>a;
    cout<<"enter second number";
    cin>>b;
    int c=a+b;
    int d=a*b;
    int e=a-b;
    float f= a/b;
    cout<<"A+B= "<<c;
    cout<<"\nA-B= "<<d;
    cout<<"\nA*B= "<<e;
    cout<<"\nA/B= "<<f;
}

```

OUTPUT:

```
enter first number10
enter second number7
A+B= 17
A-B= 70
A*B= 3
A/B= 1

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

4. Write a C++ program that will ask for a temperature in Celsius and display it in degree Fahrenheit.[$F = 9C/5 + 32$]

CODE:

```
#include <iostream>
using namespace std;
int main(){
    int temp;
    cout<<"enter temperature in celcius";
    cin>>temp;
    //[F=9C/5+32]
    int f=((9*temp)/5)+32;
    cout<<"temperature in fahrenheit= "<<f;
}
```

OUTPUT:

```
Output Clear
enter temperature in celcius0
temperature in fahrenheit= 32

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


5. WAP to format console output using '\n', '\t', '\b' , endl, setw within cout statement

CODE:

```
#include <iostream>
using namespace std;
int main(){
    cout<<"Mehma\n";
    cout<<"Mehma\tKaur"<<endl;
    cout<<"Mehma Kaur";
}
```

OUTPUT:

Output

Clear 

Mehma
Mehma Kaur
Mehma Kaur

=== Code Execution Successful ===

6. WAP to utilize assignment += and -= type operators.


CODE:

```
#include <iostream>
using namespace std;
int main(){
    int a,b;
    cout<<"enter 2 numbers";
    cin>>a>>b;
    a+=b;
    cout<<"After a+=b : "<<a<<endl;
    a-=b;
    cout<<"After a-=b : "<<a;

}
```

OUTPUT:

Output

Clear 

enter 2 numbers1 2
After a+=b : 3
After a-=b : 1

=== Code Execution Successful ===

7. WAP to swap two numbers using bitwise operator.

CODE:

```
#include <iostream>
using namespace std;

int main(){
    int a,b;
    cout<<"enter 2 numbers";
```

```

cin>>a>>b;
a=a^b;
b=a^b;
a=a^b;
cout<<"After swap: "<<a<<" "<<b;

}

```

OUTPUT:

```

enter 2 numbers2 4
After swap: 4 2

=== Code Execution Successful ===

```

8. Write a program to solve the following problem

A library charges a fine for every book return late. For first 5 days the fine is 50 paise, for 6-10 days fine is one rupee and above 10 days fine is 5 rupees. If you return the book after 30 days your membership will be cancelled .WAP to accept no. of days the member is late to return the book and display the fine or appropriate message.

CODE:

```

#include <iostream>
using namespace std;


int main(){
    int days;
    cout<<"enter number of days";
    cin>>days;
    if(0<=days && days<=5){
        cout<<"fine is rs. 50 paise";
    }
    else if(6<=days && days<=10){
        cout<<"fine is rs. 1";
    }
    else if(11<=days && days<=30){
        cout<<"fine is rs. 5";
    }
    else{
        cout<<"Your membership has been cancelled";
    }
}

```

```
}
```

OUTPUT:

Output

Clear 

```
enter number of days7
fine is rs. 1

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

9. WAP to display arithmetic operations using switch-case statement.

CODE:

```
#include<iostream>
using namespace std;
int main(){
    int a,b;
    char op;
    cout<<"enter two numbers";
    cin>>a>>b;
    cout<<"Enter operator (+,-,*,/): ";
    cin>>op;
    switch(op){
        case '+': cout<<"Sum = "<<a+b; break;
        case '-': cout<<"Sub = "<<a-b; break;
        case '*': cout<<"Mul = "<<a*b; break;
        case '/': cout<<"Div = "<<a/b; break;
        default: cout<<"Invalid operator";
    }
}
```

OUTPUT:

Output

Clear

enter two numbers1 2
Enter operator (+,-,*,/): +
Sum = 3

=== Code Execution Successful ===

10. WAP to check whether the given number is even or odd (By using if-else and conditional operator).

CODE:

```
#include <iostream>
using namespace std;
```

```
int main(){
    int n;
    cout<<"enter a number";
    cin>>n;
    if(n%2==0) cout<<"Even"<<endl;
    else cout<<"Odd"<<endl;
}
```

OUTPUT:

Output

Clear

enter a number3
Odd

=== Code Execution Successful ===