

MUHAMMAD SAIFULNIZAM BIN SAMAD

021230010929

AF201WC029YPJ

DDWC1603

C++ PROGRAMMING

SIR AZIHANAFI

1.i)

```
#include<iostream>
```

```
#include<conio.h>
```

```
using namespace std;
```

```
/*Return the max between two numbers*/
```

```
int max(int num1,int num2){
```

```
    int result;
```

```
    if (num1 > num2)
```

```
        result = num1;
```

```
    else
```

```
        result = num2;
```

```
}
```

```
int main()
```

```
{
```

```
    int i = 5;
```

```
    int j = 2;
```

```
    int k = max (i,j);
```

```
    cout <<"The maximum between"<<i<<"and"<<j<<"is"<<5;
```

```
    getch();
```

```
    return 0;
```

```
}
```

ii)

```
#include<iostream>

#include<conio.h>

using namespace std;

void printGrade(double score)
{
    if(score< 0 || score >100){
        cout<<"Invalid score";
        return;
    }
    if(score >=90.0)
        cout<<'A';
    else if(score >=80.0)
        cout<<'B';
    else if(score >=70.0)
        cout<<'C';
    else if(score >=60.0)
        cout<<'D';
    else
        cout<<'F';
}

int main()
{
    cout<<"Enter a score";

    double score;

    cin>>score;

    cout<<"The grade is";

    printGrade(score);

    getch();

    return 0;
}
```

OUTPUT:

```
Enter a score 90.0
The grade isA

...Program finished with exit code 0
Press ENTER to exit console.
```

iii)

```
#include<iostream>
#include<conio.h>
using namespace std;
/**Swap two variables*/
void swap(int n1,int n2)
{
    cout<<"\tInside the swap function"<<endl;
    cout<<"\tBefore swapping n1 is"<<n1<<"n2 is"<<n2<<endl;
    //Swap n1 with n2
    int temp = n1;
    n1 = n2;
    n2 = temp;
    cout<<"\t\tAfter swapping n1 is"<<n1<<"n2 is"<<n2<<endl;
}
int main()
{
    //Declare and initialize variables
    int num1 = 1;
    int num2 = 2;
    cout<<"Before invoking the swap function,num1 is"<<num1<<"and num2 is"<<num2<<endl;
    //Invoke the swap function to attempt to swap two variables
    swap(num1,num2);
    cout<<"After invoking the swap function,num1 is"<<num1<<"and num2 is"<<num2<<endl;
```

```
    getch();  
    return 0;  
}
```

iv)

```
#include<iostream>  
#include<conio.h>  
using namespace std;  
void bintang(int i,int num)  
{  
    for (int j = 1; j<=i; j++)  
    {  
        cout<<num<< " ";  
        num*=2;  
  
    }  
    cout<<endl;  
}  
int main()  
{  
    int i = 1;  
    while(i<=6)  
    {  
        bintang(i,2);  
        i++;  
    }  
    getch();  
    return 0;  
}
```

OUTPUT:

```
2
2 4
2 4 8
2 4 8 16
2 4 8 16 32
2 4 8 16 32 64
```

2)

```
#include<iostream>

#include<conio.h>

using namespace std;

int main()
{
    double Celsius;
    double C1,C2,C3;
    double Fahrenheit;
    double F1,F2,F3;

    cout<<"Please enter your three temperature Celsius;"<<endl;
    cin>>C1>>C2>>C3;

    cout<<"Please enter your three temperature Fahrenheit;"<<endl;
    cin>>F1>>F2>>F3;

    double FC1 =(9.0/5)*C1 + 32;
    double FC2 =(9.0/5)*C2 + 32;
    double FC3 =(9.0/5)*C3 + 32;

    double CF1 =(F1-32)*5/9;
    double CF2 =(F2-32)*5/9;
    double CF3 =(F3-32)*5/9;
```

```

    cout<< "Celsius   Fahrenheit | Fahrenheit   Celsius"<<endl;
    cout<< ""<<C1<<" "<<FC1<<" | "<<F1<<" "<<C1<< endl;
    cout<< ""<<C2<<" "<<FC2<<" | "<<F2<<" "<<C2<< endl;
    cout<< ""<<C3<<" "<<FC3<<" | "<<F3<<" "<<C3<< endl;

    return 0;
}

```

OUTPUT:

Please enter your three temperature Celsius;

50.0

45.0

40.0

Please enter your three temperature Fahrenheit;

140.0

120.0

20.0

Celsius Fahrenheit | Fahrenheit Celsius

50 122 | 140 50

45 113 | 120 45

40 104 | 20 40