

1)

```
#include <iostream>
#include <conio.h>
using namespace std;
int max(int num1, int num2) {
    int result;
    if (num1 > num2)
        result = num1;
    else
        result = num2;
    return result;
}
int main()
{
    int i = 5;
    int j = 2;
    int k = max(i, j);
    cout << "The maximum between " << i << " and " << j << " is " << k;
    getch();
    return 0;
}
```

2)

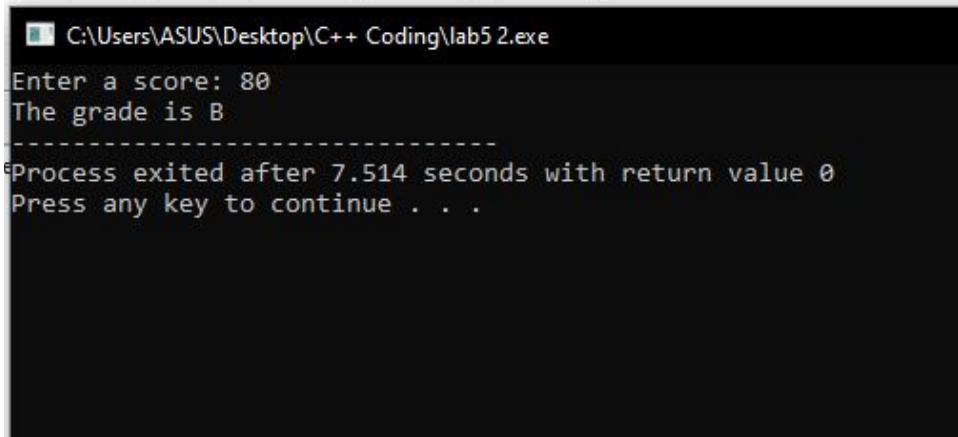
```
#include <iostream>
#include <conio.h>
using namespace std;
void printGrade(double score)
{
    if (score < 0 || score > 100) {
        cout << "Invalid score";
        return;
    }
    if (score >= 90.0)
        cout << 'A';
    else if (score >= 80.0)
        cout << 'B';
    else if (score >= 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



```

C:\Users\ASUS\Desktop\C++ Coding\lab5 2.exe
Enter a score: 80
The grade is B
-----
Process exited after 7.514 seconds with return value 0
Press any key to continue . . .

```

```

3)
#include <iostream>
#include <conio.h>
using namespace std;
/** Swap two variables */
void swap(int n1, int n2)
{
cout << "\tInside the swap function" << endl;
cout << "\t\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;
}

```

4)

```

#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

```
C:\Users\ASUS\Desktop\C++ Coding\lab5 4.exe
2
2 4
2 4 8
2 4 8 16
2 4 8 16 32
2 4 8 16 32 64

-----
Process exited after 3.077 seconds with return value 0
Press any key to continue . . .
```

2)

```
#include <iostream>
#include <conio.h>
using namespace std;
int main() {
double celsius;
double c1, c2, c3;
double fahrenheit;
double f1, f2, f3;

cout << "Enter 3 Celsius : " << endl;
cin >> c1 >> c2 >> c3;
cout << "Enter 3 Farenheit : " << endl;
cin >> f1 >> f2 >> f3;

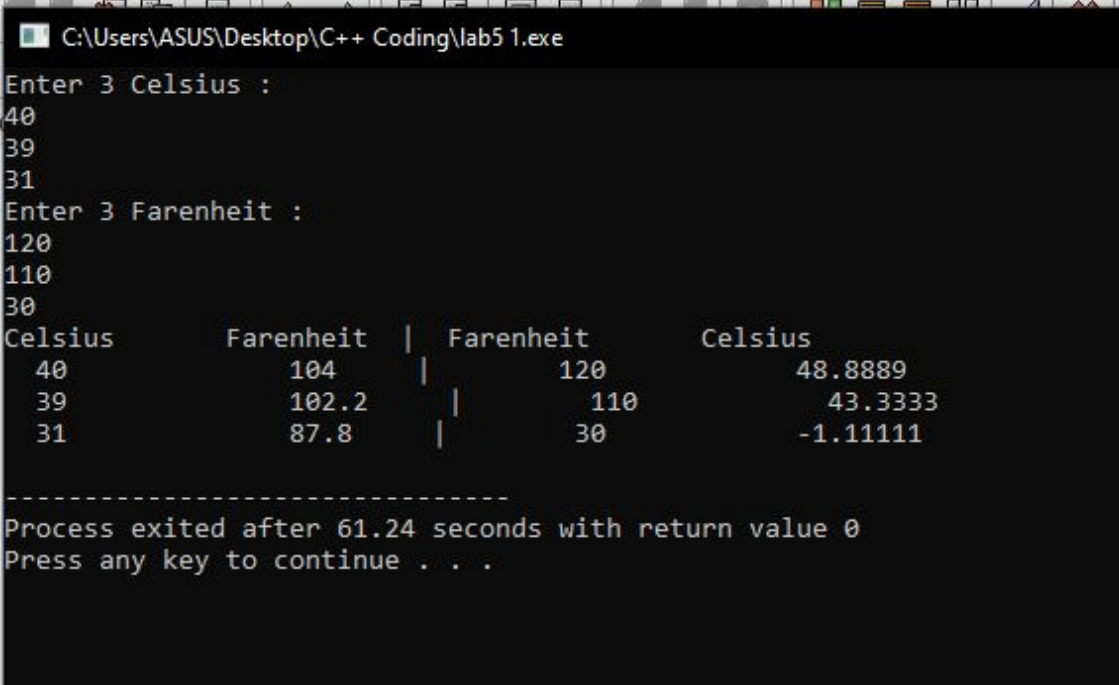
double fc1 = (9.0/5)*c1+32;
double fc2 = (9.0/5)*c2+32;
double fc3 = (9.0/5)*c3+32;

double cf1 = (f1-32)*5/9;
double cf2 = (f2-32)*5/9;
double cf3 = (f3-32)*5/9;

cout << "Celsius      Farenheit | Farenheit      Celsius  " << endl;
cout << " " << c1 << "          " << fc1 << " | " << f1 << "          " << cf1 << endl;
cout << " " << c2 << "          " << fc2 << " | " << f2 << "          " << cf2 << endl;
cout << " " << c3 << "          " << fc3 << " | " << f3 << "          " << cf3 << endl;
```

```
return 0;  
}
```

### Output



The screenshot shows a terminal window titled "C:\Users\ASUS\Desktop\C++ Coding\lab5 1.exe". The program prompts the user to "Enter 3 Celsius :" and receives inputs 40, 39, and 31. It then prompts "Enter 3 Farenheit :" and receives inputs 120, 110, and 30. The output is a table with two columns: Celsius and Farenheit. The first column contains the Celsius values (40, 39, 31) and the second column contains the corresponding Farenheit values (104, 102.2, 87.8). The third column contains the Farenheit values (120, 110, 30) and the fourth column contains the corresponding Celsius values (48.8889, 43.3333, -1.11111). The table is separated by a vertical line. Below the table, the program displays "-----", "Process exited after 61.24 seconds with return value 0", and "Press any key to continue . . .".

```
C:\Users\ASUS\Desktop\C++ Coding\lab5 1.exe  
Enter 3 Celsius :  
40  
39  
31  
Enter 3 Farenheit :  
120  
110  
30  
Celsius      Farenheit    | Farenheit    Celsius  
40           104      | 120          48.8889  
39           102.2    | 110          43.3333  
31           87.8     | 30           -1.11111  
-----  
Process exited after 61.24 seconds with return value 0  
Press any key to continue . . .
```