

Quiz# 2: Solution

Roll number: _____

Total marks: 15

Total time: 25 minutes


What will be the output of following programs?

2 marks

(a).

```
#include <iostream>
#include <iomanip>
using namespace std;
int main() {
    int s = 12;
    if (s < 20)
        cout<<"Under ";
    else
        cout<<"Over ";
        cout<<"the limit.";
    return 0;
}
```

Output:

 Microsoft Visual Studio Debug Console


Under the limit.

(b).

2 marks

```
#include <iostream>
#include <iomanip>
using namespace std;
int main() {
    int s = 25;
    if (s < 20)
        cout<<"Under ";
        cout<<"Over ";
        cout<<"the limit.";
    return 0;
}
```

Output:

 Microsoft Visual Studio Debug Console

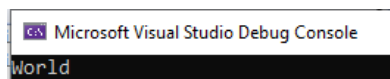
Over the limit.

(c).

2 marks

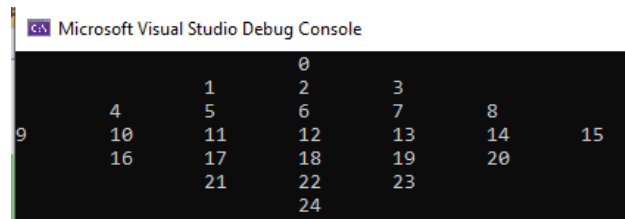
```
#include <iostream>
#include <iomanip>
using namespace std;
int main() {
    int s = 12;
    if (s == 20)
        cout<<"equal to 20 ";
    else if(s > 20)
        cout<<"Hello";
    else
        cout<<"World";
    return 0;
}
```

Output:

A screenshot of the Microsoft Visual Studio Debug Console. The title bar reads "Microsoft Visual Studio Debug Console". The console output shows the word "World" in white text on a black background.

Write a program in C++ that prints the following pattern using escape sequences “\t” and “\n”. You are not allowed to use add spaces manually (using keyboard spacebar), instead use “\t” to add a space. If space is added manually then ZERO will be awarded. You are not allowed to use loops.

5 marks

A screenshot of the Microsoft Visual Studio Debug Console showing a pattern of numbers. The numbers are arranged in a grid-like structure using tabs and newlines. The pattern is as follows:

```

      0
      2   3
      5   6   7   8
9    10  11  12  13  14  15
      16  17  18  19  20
           21  22  23
              24
```

```
#include <iostream>
using namespace std;
int main() {
    cout << "\t\t\t0\n";
    cout << "\t\t1\t2\t3\n";
    cout << "\t4\t5\t6\t7\t8\n";
    cout << "9\t10\t11\t12\t13\t14\t15\n";
    cout << "\t16\t17\t18\t19\t20\n";
    cout << "\t\t21\t22\t23\n";
    cout << "\t\t\t24\n";
    return 0;
}
```

Write a program in c++ that takes an integer number as an input from user. The program should then display

- “High” if the number lies in the range 20-35 (inclusive of 20 and 35)
- “Low” if the number lies in the range 10-19 (inclusive of 10 and 19)
- “Invalid entry” otherwise

4 marks

```
#include <iostream>
using namespace std;
int main() {
    int num=0;
    cin >> num;
    if(num >= 20 && num <= 35)
        cout << "High";
    else if(num >= 10 && num <= 19)
        cout << "Low";
    else
        cout << "Invalid entry";
    return 0;
}
```