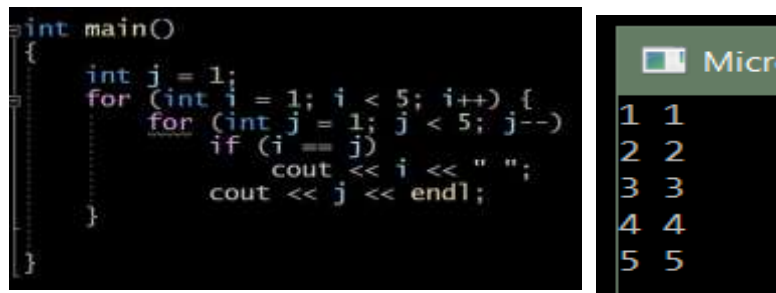


Duration: 2 Hours Don't use google search or course slides, just answer what you know

Exam 1 (Total: 100 Points)

- 1- What are the differences between If Condition and Switch, **with example**?
Mention three differences. (15 Points)
- 2- What is the difference between do-while and for, **with example**? (10 Points)
- 3- What are primitive data types in C++? (10 Points)
- 4- Write a function that takes an integer array and return average, then call it in main function. (15 Points)
- 5- Write a function that takes 3 integers and return the maximum value, then call it in main function. (10 Points)
- 6- Write a function take two integers to swap them, then call it in main function. (**Using Pointer**) (15 Points)
- 7- Without copying the following code on compiler, **Fix** the issues in code to make it print the following output, then **write** the fixed code. (10 Points)




```
int main()
{
    int j = 1;
    for (int i = 1; i < 5; i++) {
        for (int j = 1; j < 5; j--)
            if (i == j)
                cout << i << " ";
        cout << j << endl;
    }
}
```

Micro

1 1
2 2
3 3
4 4
5 5

- 8- Without copying the following code on compiler,

Draw the below code :
(15 Points)



```
int main()
{
    int num = 5;
    for (int i = 1; i <= num; i++) {
        for (int j = 1; j <= 5; j++)
            if (j == 1 || j == i || i == num) {
                cout << "x";
            }
            else {
                cout << " ";
            }
        cout << endl;
    }
}
```