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;
    }
}
```

```
Micr
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 << "*";
            }
            else {
                cout << " ";
            }
        cout << endl;
    }
}
```