**Assignment 2 - 5th January 2021**

**Question 1**

Write a program to print the following pattern

1

2\*2

3\*3\*3

4\*4\*4\*4

**Program:**

#include<stdio.h>

int main()

{

int i, j;

for(i=1;i<=4;i++)

{

for(j=1;j<=i; j++)

{

printf("%d",i);

if(j!=i)

printf("\*");

}

printf("\n");

}

**Question 2**

Write a program to print the following pattern

1

01

101

0101

10101

**Program:**

#include<stdio.h>

int main()

{

int i,j;

for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)

{

if((i+j)%2==0)

printf("1");

else

printf("0");

}

printf("\n");

}

}

**Question 3**

Write the similarity and difference between an array name and a pointer variable.

**Solution:**

* The similarity between the array and pointer is, an array is a constant pointer and pointer holds the address of an array.
* An array is a collection of elements of same data type. But a pointer points to address of a different variable of different data types.
* Either incrementing/decrementing can possible in pointer, but it is not possible in an array.