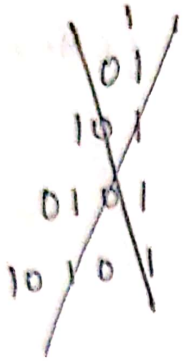
ASSIGNMENT - 2

1. Write a program to print the following pattern.

```
1
2 * 2
3 * 3 * 3
4 * 4 * 4 * 4
```

```
#include <stdio.h>

int main() {

  int i, j, rows;

  printf("Enter the number of rows: ");

  Scanf("%d", &rows);

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

  {

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

  {

    printf("%d", i);

  }

  printf("\n");

  } return 0;
```

(2) Write a program to print the following Pattern:



1
0 1
1 0 1
0 1 0 1
1 0 1 0 1

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int i,j,n;
  clrscr();
  printf("\n Enter the Value of n:");
  Scanf("%d",&n);
  for(i=0;i<=n;i++)
  {
  for(j=1;j<i;j++)
  {
  for((i+j)%2==0)
  {
  printf("1t0");
  }
  else
```

```
{
  printf("\t1");
  }
  }
  printf("\n");
  }
  getch();
  }
```

3. An array is a collection of elements of similar data types whereas the pointer is a variable that stores the address of another variable. An array size decides the number of variables it can stores whereas, a pointer variable can store the address of only one variable in it.