Question 1

Write a program to print the following pattern

1

2\*2

3\*3\*3

4\*4\*4\*4

Ans).

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

{

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

{

printf(“%d”,i);

if(j==i)

break;

printf(“\*”);

}

printf(“\n”);

}

Question 2

Write a program to print the following pattern

1

01

101

0101

10101

Ans).

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

{

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

{

if((i%2==0 && j%2==0) || (i%2!=0 && 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.

Ans).

Similarity –

A pointer is a variable which stores the address of another variable having same datatype and an array has a name which stores the address of the first element present in the array.

Difference-

We can make changes in a pointer, like we can make it point to some other address or may increment/decrement too whereas we can make no changes in an array, it will always point to the base address.