JavaScript Assignment-2

1. Prime numbers from 1 to 50.

```
 for(var i=2;i<=50;i++)
{
   var flag=true
   for(var j=2;j<=i-1;j++){
      if(i%j==0)
      {
         flag=false;
         break;
      }
   }
   if(flag==true)
   {
      console.log(i);
   }
}
```

2. **Triangular number sequence.(1,3,6,10,15,21,...)=>(1,1+2=3,1+2+3=6,1+2+3+4=10,...)**

```
let count=0;
let j=0;
let v;
for(var i=1;i<=10;i++)
{
   v=j+count+i;
   j=v;
   console.log(v)
}
```

3. **Print the pattern like as follows for a given input as 6?**

```
*
**
***
****
*****
******
```

```
let n=5;
let string=" ";
let i=0;
let j=0;
for(let i=0;i<=n;i++)
{
   for(let j=0;j<i;j++)
   {
      string += "*";
   }
   string +="\n";
}
console.log(string);
```

4. **Print the Triangle (Pyramid) pattern?**

```
      *
     *   *
    *   *   *
   *   *   *  *
```

```
let n=6;
let string=" ";
for(let i=1;i<=n;i++)
{
   for(let j=1;j<=n-i;j++)
   {
      string += " ";
```

```
  }
  for(let k=1;k<i;k++)
  {
    string += "*";
    string += " ";
  }
  string +="\n";
}
console.log(string);
```

5) Print the diamond?

```
A) let n = 5;
let string = "";
for (let i = 0; i < n; i++) {
  for (let j = 0; j < i; j++) {
    string += " ";
  }
  for (let k = 0; k < 2 * (n-i) - 1; k++) {
    string += "*";
  }
  string += "\n";
}
console.log(string);
```

7)Fibonacci Series?

```
A) <html>
<head>
<title> Fibonacci Series in JavaScript </title>
</head>
<body>
<script>
var n1 = 0,  n2 = 1, next_num, i;
var num = parseInt (prompt (" Enter the limit for Fibonacci Series "));
document.write( "Fibonacci Series: ");
```

```
for ( i = 1; i <= num; i++)
{  document.write (" <br> " +  n1);
    next_num = n1 + n2;
        n1 = n2;
    n2 = next_num;
}
 </script>
</body>
```

8) why the do while is important?

A) Introduction to the JavaScript do-while statement

The do-while loop statement creates a loop that executes a block of code until a test condition evaluates to false . Unlike the while loop, the do-while loop always executes the body at least once before it evaluates the expression.