1. Write a program to print Alphabets A, B, C, D, E, F, G, and H, using patter programming logic.

Ans:

```
public class Day_9_Assignment {
             public static void main(String[] args) {
                           int n=10;
   //A
                                     for(int i=0; i<n; i++)
                                        for(int j=0; j<n; j++)
                                                      if( i==0\&\& j<(n-1)/2 \&\& j>0 || j==0\&\& i>0 || i==(n-1)/2 \&\& j<=(n-1)/2 || j==(n-1)/2 || i==(n-1)/2 
&& i>0)
                                                                    System.out.print("*");
                                                       else
                                                      System.out.print(" ");
                                         System.out.println();
             //B
                                     for(int i=0; i<n; i++)
                                        for(int j=0; j<n; j++)
                                                      if( i== 0 \&\& j<(n-1)/2 || j==0||i==(n-1) \&\& j<(n-1)/2 || j==(n-1)/2 \&\& i>0 \&\& i<(n-1)
||i==(n-1)/2 \&\& j < (n-1)/2 |
                                                                    System.out.print("*");
                                                      }
```

```
else
           System.out.print(" ");
        System.out.println();
//C
  for(int i=0; i<n; i++)
  for(int j=0; j<n; j++)
     if( i==0&& j<=(n-1)/2 || j==0 ||i==(n-1)&& j<=(n-1)/2 )
     {
        System.out.print("*");
     }
     else
     System.out.print(" ");
  System.out.println();
//D
   for(int i=0; i<n; i++)
     for(int j=0; j<n; j++)
        if(i==0 \ \&\& \ j<(n-1)/2 \ || \ j==0 \ || \ j==(n-1)/2 \ \&\& \ i>0 \ \&\& \ i< n-1 \ || \ i==n-1 \ \&\& \ j<(n-1)/2)
           System.out.print("*");
        else
        System.out.print(" ");
     }
```

```
System.out.println();
//E
   for(int i=0; i<n; i++)
     for(int j=0; j<n; j++)
        if(i==0 \&\& j<=(n-1)/2 || j==0 || j<=(n-1)/2 \&\& i==(n-1)/2 || i==n-1 \&\& j<=(n-1)/2)
           System.out.print("*");
        else
        System.out.print(" ");
     }
     System.out.println();
    }
//F
 for(int i=0; i<n; i++)
for(int j=0; j<n; j++)
   if(i==0 \&\& j<=(n-1)/2 || j==0 || j<=(n-1)/2 \&\& i==(n-1)/2 )
      System.out.print("*");
   else
   System.out.print(" ");
}
System.out.println();
```

```
//G
```

```
for(int i=0; i<n; i++)
for(int j=0; j<n; j++)
   if(i==(n-1) \&\& j<(n-1)/4 \parallel j==0 \parallel j==(n-1)/4 \&\& i<(n-1)/2 \parallel i==(n-1)/2 \&\& j<(n-1)/4 \&\&
j<(n-1)/2 \mid j==(n-1)/2 \&\& i<(n-1)/2
   {
      System.out.print("*");
   }
   else
   System.out.print(" ");
}
System.out.println();
}
// H
      for(int i=0; i<n; i++)
      for(int j=0; j<n; j++)
         if( j==0 || i==(n-1)/2 || j==n-1)
            System.out.print("*"); }
          else
         System.out.print(" ");
      System.out.println();
}
```

// 2. Write a program to print a triangle using star pattern programming logic

3. WAP to print.

```
public class Day_9_Assignment {

public static void main(String[] args) {
    Int n=11;

    for(int i=0; i<n; i++) {
        for (int j = 0; j < n; j++) {
            if (j == 0 || i == 0 || i == (n - 1) || j == (n - 1) || i + j <= (n - 1) / 2 ||
            j-i >= (n - 1) / 2 ) {
                System.out.print("*");
        } else {
                System.out.print(" ");
        }
    }
    System.out.println(" ");
}
```

4. Write a program to print PW SKILLS using pattern programming logic.

```
public class pw_assingment_09 {
    public static void main(String[] args) {
        int n=10;

//P

        for(int i=0; i<n; i++){
            for(int j=0; j<n; j++){
                if(j==0|| i==0&& j<(n-1)/2 || i==(n-1)/2 &&j<(n-1)/2 || j==(n-1)/2 && i> 0

&&i<(n-1)/2){
            System.out.print( "*");
            } else {
                System.out.print(" ");
            }
            System.out.println(" ");
        }
            System.out.println(" ");
        }
}</pre>
```

//w

```
for(int i=0; i<n; i++){
    for(int j=0; j<n; j++){
        if(j==0|| j==(n-1)|| i+j==(n-1) && j<=(n-1)/2 || i-j==0 && i>=(n-1)/2){
            System.out.print( "*");
        }else {
            System.out.print(" ");
        }
    }
    System.out.println(" ");
}
```

```
//s
     for(int i=0; i<n; i++){
        for(int j=0; j<n; j++){
          if(i==0)|j==0\&\& i<=(n-1)/2||j==(n-1)\&\&i>(n-1)/2||i==(n-1))
             System.out.print( "*");
          }else {
             System.out.print(" ");
          }
        System.out.println(" ");
     }
//k
     for(int i=0; i<n; i++){
        for(int j=0; j<n; j++){
          if(j==0||i+j==(n-1)/2||i-j==(n-1)/2)
             System.out.print( "*");
          }else {
             System.out.print(" ");
          }
        }
        System.out.println(" ");
     }
// I
     for(int i=0; i<n; i++){
        for(int j=0; j<n; j++){
          if(j==0)
             System.out.print( "*");
          }else {
             System.out.print(" ");
          }
```

System.out.println(" ");

}

```
for(int i=0; i<n; i++){
    for(int j=0; j<n; j++){
        if(j==0|| i==(n-1) ){
            System.out.print( "* ");
        }else {
            System.out.print(" ");
        }
        }
        System.out.println(" ");
    }
}</pre>
```

5. Write a program to print "RAJAN KAUMR" your full name using pattern programming logic.

```
public class assignment {
    public static void main(String[] args) {
        int n=11;

//R
        for(int i=0; i<n; i++){
            for(int j=0; j<n; j++){
                if(j==0|| i==0&& j<=(n-1)/2 || i==(n-1)/2 && j<=(n-1)/2 || i-j==(n-1)/2 ){
                System.out.print( "*");
            } else {
                System.out.print(" ");
            }
            System.out.println(" ");
        }
    }
    System.out.println(" ");
}</pre>
```

```
for(int i=0; i<n; i++)
                                                                                  for(int j=0; j<n; j++)
                                                                                                                if( i==0\&\& j<(n-1)/2 \&\& j>0 || j==0\&\& i>0 || i==(n-1)/2 \&\& j<=(n-1)/2 || j==(n-1)/2 || i==(n-1)/2 
&& i>0)
                                                                                                                {
                                                                                                                                            System.out.print("*");
                                                                                                                else
                                                                                                                System.out.print(" ");
                                                                                  }
                                                                                  System.out.println();
                         //J
                                                      for(int i=0; i<n; i++){
                                                                                  for(int j=0; j<n; j++){
                                                                                                                if(i==0)| j==(n-1)/2 || i==(n-1) & j <=(n-1)/2 || j== 0 & i>=(n-1)/2 || j== 0 & i==(n-1)/2 || j==(n-1)/2 || j==(n-1)/2
                                                                                                                                             System.out.print( "*");
                                                                                                                }else {
                                                                                                                                            System.out.print(" ");
                                                                                                                }
                                                                                    System.out.println(" ");
                                                      }
```

```
// A
      for(int i=0; i<n; i++)
                                   {
                                      for(int j=0; j<n; j++)
                                                   if( i==0\&\& j<(n-1)/2 \&\& j>0 || j==0\&\& i>0 || i==(n-1)/2 \&\& j<=(n-1)/2 || j==(n-1)/2 || i==(n-1)/2 
&& i>0)
                                                   {
                                                                System.out.print("*");
                                                   else
                                                   System.out.print(" ");
                                      }
                                      System.out.println();
            //N
                         for(int i=0; i<n; i++){
                                      for(int j=0; j<n; j++){
                                                   if(j==0|| j==(n-1)|| i-j== 0 ){
                                                                System.out.print( "*");
                                                   }else {
                                                                System.out.print(" ");
                                                   }
                                      System.out.println(" ");
                         }
      // K
   for(int i=0; i<n; i++){
                                      for(int j=0; j<n; j++){
                                                   if(j==0||i+j==(n-1)/2||i-j==(n-1)/2)
                                                                System.out.print( "*");
                                                   }else {
                                                                System.out.print(" ");
                                                   }
```

```
}
                                   System.out.println(" ");
                       }
       // U
                       for(int i=0; i<n; i++){
                                   for(int j=0; j<n; j++){
                                               if(j==0 || j==(n-1) || i==(n-1)
                                                                                                                                                                                                         ){
                                                            System.out.print( "*");
                                               }else {
                                                            System.out.print(" ");
                                               }
                                   }
                                   System.out.println(" ");
                       }
            // M
                       for(int i=0; i<n; i++){
                                   for(int j=0; j<n; j++){
                                               if(j==0)| j==(n-1)|| i-j==0 && i<(n-1)/2 || i+j== (n-1) &&i<=(n-1)/2
                                                                                                                                                                                                                                                                                                                                                                                   ){
                                                            System.out.print( "*");
                                               }else {
                                                            System.out.print(" ");
                                               }
                                   }
                                   System.out.println(" ");
                       }
                  // A
     for(int i=0; i<n; i++)
                                   for(int j=0; j<n; j++)
                                   {
                                               if( i==0\&\& j<(n-1)/2 \&\& j>0 || j==0\&\& i>0 || i==(n-1)/2 \&\& j<=(n-1)/2 || j==(n-1)/2 || i==(n-1)/2 
&& i>0)
                                                            System.out.print("*");
```

```
}
            else
            System.out.print(" ");
         }
         System.out.println();
    // R
 for(int i=0; i<n; i++){
         for(int j=0; j<n; j++){
            if(j = 0 || \ i = 0 \& \& \ j < = (n-1)/2 \ || \ i = = (n-1)/2 \ \& \ j < = (n-1)/2 \ || \ j = = (n-1)/2 \ \& \ i < = (n-1)/2 \ ||
i-j==(n-1)/2 ){
               System.out.print( "*");
            }else {
               System.out.print(" ");
            }
         System.out.println(" ");
     }
}
```