1. **Write a program to print alphabets A,B,C,D,E,F,G,H using pattern programming logic?**

**~> 1.Program for alphabet A:**

**import java.util.Scanner;**

**public class NestedpatternA {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<((n-1)/2)||i>0&&j==0||i>0&&j==((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**2.Program for alphabet B:**

**import java.util.Scanner;**

**public class NestedpatternB {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i>=0&&j==0||i==0&&j<((n-1)/2)||i>0&&i<((n-1)/2)&&j==((n-1)/2)||i==((n-1)/2)&&j<((n-1)/2)||**

**i>((n-1)/2)&&j==((n-1)/2)&&i<n-1||i==n-1&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**3.Program for alphabet C:**

**import java.util.Scanner;**

**public class NestedpatternC {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i>0&&i<n-1&&j==0||i==0&&j>0&&j<((n-1)/2)||i==n-1&&j>0&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**4.Program for alphabet D:**

**import java.util.Scanner;**

**public class NestedpatternD {**

**public static void main(String []args)**

**{**

**Scanner fayaz=new Scanner(System.in);**

**int n,i,j;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(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))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**5.Program for alphabet E:**

**import java.util.Scanner;**

**public class NestedpatternE {**

**public static void main(String []args)**

**{**

**Scanner fayaz=new Scanner(System.in);**

**int n,i,j;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==0&&j<=((n-1)/2)||i==n-1&&j<=((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**6.Program for alphabet F:**

**import java.util.Scanner;**

**public class NestedpatternF {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int n,i,j;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==0&&j<=((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**7.Program for alphabet G:**

**import java.util.Scanner;**

**public class NestedpatternG {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i>0&&i<n-1&&j==0||i==0&&j>0&&j<((n-1)/2)||i==n-1&&j>0&&j<((n-1)/2)||i==((n-1)/2)&&j>2&&j<=((n-1)/2)**

**||i>((n-1)/2)&&i<(n-1)&&j==((n-1)/2)-1||i>((n-1)/2)&&i<((n-1)-1)&&j==((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

**8.Program for alphabet H:**

**import java.util.Scanner;**

**public class NestedpatternH {**

**public static void main(String []args)**

**{**

**Scanner fayaz=new Scanner(System.in);**

**int n,i,j;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(j==0||j==((n-1)/2)||i==((n-1)/2)&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

1. **Write a program to print a triangle using star pattern programming language?**

**import java.util.Scanner;**

**public class Triangle {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j<=((n-1)/2)||j==0&&i<=((n-1)/2)||i+j<=((n-1)/2)||**

**i==0&&j>=((n-1)/2)||j==n-1&&i<((n-1)/2)||j-i>=((n-1)/2)||**

**j==0&&i>=((n-1)/2)||i==n-1&&j<=((n-1)/2)||i-j>=((n-1)/2)||**

**j==n-1&&i>=((n-1)/2)||i==n-1&&j>=((n-1)/2)||i+j>=(n-1)+((n-1)/2)||**

**i>=((n-1)/2))**

**{**

**System.out.print("\*");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.print(" ");**

**for(j=0;j<n;j++)**

**{**

**if(i+j>=((n-1)/2)&&i<=((n-1)/2)&&j<=((n-1)/2)||j-i<=((n-1)/2)&&i<=((n-1)/2)&&j>=((n-1)/2)||i==((n-1)/2))**

**{**

**System.out.print("\*");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.print(" ");**

**for(j=0;j<n;j++)**

**{**

**if(i+j==((n-1)/2)||j-i==((n-1)/2)||i==((n-1)/2))**

**{**

**System.out.print("\*");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

1. **Write a program to print the below pattern?**

**+++++++++++**

**+++++ +++++**

**++++ ++++**

**+++ +++**

**++ ++**

**+ +**

**+ +**

**+ +**

**+ +**

**+ +**

**++++++++++**

**import java.util.Scanner;**

**public class Assignmentproblem {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j<=((n-1)/2)||j==0&&i<=((n-1)/2)||i+j<=((n-1)/2)||**

**i==0&&j>=((n-1)/2)||j==n-1&&i<((n-1)/2)||j-i>=((n-1)/2)||**

**j==0&&i>=((n-1)/2)||i==n-1&&j<=((n-1)/2)||**

**j==n-1&&i>=((n-1)/2)||i==n-1&&j>=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

1. **Write a program to print PW SKILLS using pattern programming logic?**

**import java.util.Scanner;**

**public class PW\_SKILLS {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i>=0&&j==0||i==0&&j<((n-1)/2)||i>0&&i<((n-1)/2)&&j==((n-1)/2)||i==((n-1)/2)&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==j&&j>=((n-1)/2)||i+j==(n-1)&&j<=((n-1)/2)||j==(n-1))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.print(" ");**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<=((n-1)/2)||i>0&&i<((n-1)/2)&&j==0||i==((n-1)/2)&&j>0&&j<=((n-1)/2)||i>((n-1)/2)&&i<(n-1)&&j==((n-1)/2)||i==(n-1)&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(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(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j<=((n-1)/2)||i==n-1&&j<=((n-1)/2)||j==((n-1)/2)/2)**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==n-1&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==n-1&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<=((n-1)/2)||i>0&&i<((n-1)/2)&&j==0||i==((n-1)/2)&&j>0&&j<=((n-1)/2)||i>((n-1)/2)&&i<(n-1)&&j==((n-1)/2)||i==(n-1)&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**

1. **Write a program to print your Full Name using pattern programming logic?**

**~> My Full Name is : S FAYAZ**

**import java.util.Scanner;**

**public class Myname {**

**public static void main(String []args) {**

**Scanner fayaz=new Scanner(System.in);**

**int i,j,n;**

**System.out.println("Enter the value of n");**

**n=fayaz.nextInt();**

**for(i=0;i<n;i++)**

**{**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<=((n-1)/2)||i>0&&i<((n-1)/2)&&j==0||i==((n-1)/2)&&j>0&&j<=((n-1)/2)||i>((n-1)/2)&&i<(n-1)&&j==((n-1)/2)||i==(n-1)&&j<((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.print(" ");**

**for(j=0;j<n;j++)**

**{**

**if(j==0||i==0&&j<=((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<((n-1)/2)||i>0&&j==0||i>0&&j==((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==j&&i<((n-1)/2)||i+j==n-1&&i<((n-1)/2)||i>=((n-1)/2)&&j==((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==0&&j>0&&j<((n-1)/2)||i>0&&j==0||i>0&&j==((n-1)/2)||i==((n-1)/2)&&j<=((n-1)/2))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**for(j=0;j<n;j++)**

**{**

**if(i==0||i==n-1||i+j==((n-1)))**

**{**

**System.out.print("+");**

**}**

**else**

**{**

**System.out.print(" ");**

**}**

**}**

**System.out.println();**

**}**

**}**

**}**