

Include front page and acknowledgement, index page, source code, output, variable description, conclusion, etc. in your project before taking the print out.

```
//Patterns Project

import java.util.Scanner;

class Patterns

{

    public static void main()

    {

        Scanner sc=new Scanner(System.in);

        int ch=0,ans=1;

        while(ans==1)

        {

            //Menu

            System.out.println("(1) Pattern 1\n(2) Pattern 2\n(3) Pattern

3\n(4) Pattern4 \n(5) Exit");

            System.out.println("Enter your choice :");

            ch=sc.nextInt();                //accepting choice

            switch(ch)
```

```
{
```

case 1:

```
for(int i=1;i<=5;i++)  
{  
    for(int j=1;j<=i;j++)  
    {  
        System.out.print(j+" ");  
    }  
    System.out.println();  
}  
break;
```

case 2:

```
for(int i=5;i>=1;i--)  
{  
    for(int j=1;j<=i;j++)  
    {  
        System.out.print(j+" ");  
    }  
}
```

```
    }  
    System.out.println();  
}  
break;
```

case 3:

```
System.out.println("Enter a word : ");  
String w=sc.next();  
for(int i=0;i<w.length();i++)  
{  
    for(int j=0;j<=i;j++)  
    {  
        System.out.print(w.charAt(j)+" ");  
    }  
    System.out.println();  
}  
break;
```

case 4:

```
char ch1='A';  
for(int i=1;i<=5;i++)
```

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

        {
            System.out.print(ch1+" ");
            ch1++;
        }
        System.out.println();
    }
    break;
case 5:
    System.out.println("Exit");
    System.exit(0);
default:
    System.out.println("Wrong input ....");
}

//Enter your choice whether you wish to continue or not
    System.out.println("Do you wish to continue ...Press 1
otherwise 0.");

    ans=sc.nextInt();
```

```
    }  
  }  
}
```

OUTPUT

(1) Pattern 1

(2) Pattern 2

(3) Pattern 3

(4) Pattern4

(5) Exit

Enter your choice :

1

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

Do you wish to continue ...Press 1 otherwise 0.

1

(1) Pattern 1

(2) Pattern 2

(3) Pattern 3

(4) Pattern4

(5) Exit

Enter your choice :

3

Enter a word :

JAVA

J

J A

J A V

J A V A

Do you wish to continue ...Press 1 otherwise 0.

1

(1) Pattern 1

(2) Pattern 2

(3) Pattern 3

(4) Pattern4

(5) Exit

Enter your choice :

4

A

B C

D E F

G H I J

K L M N O

Do you wish to continue ...Press 1 otherwise 0.

1

(1) Pattern 1

(2) Pattern 2

(3) Pattern 3

(4) Pattern4

(5) Exit

Enter your choice :

2

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

Do you wish to continue ...Press 1 otherwise 0.

0