

Simple Nested For Loop 4

Q1

write a program to print the following pattern

```
C2W10
C2W9      C2W8
C2W7      C2W6      C2W5
C2W4      C2W3      C2W2      C2W1
```

USE THIS FOR LOOP STRICTLY for the outer loop

```
Int row=4;
for(int i =1;i<=row;i++){

}
```

Solution1:.

```
class Solution1{

    public static void main(String []args){

        int row=4;
        int n= (row * (row+1))/2;           // (4*(4+1))/2 = 10
        for(int i =1;i<=row;i++){

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

                System.out.print("C2W"+ n-- +" ");
            }
            System.out.println();
        }

    }
}
```

Q2

write a program to print the following pattern

```
1
3  4
6  7  8
10 11 12 13
15 16 17 18 19
```

USE THIS FOR LOOP STRICTLY for the outer loop

```
int row=5;
for(int i=1;i<=row;i++){

}
```

Solution2:

```
class Solution2{

    public static void main(String []args){

        int row=5;
        int n=1;
        for(int i=1;i<=row;i++){

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

                System.out.print(n+++" ");           //first prints and then increments

            }
            n++;
            System.out.println();
        }

    }
}
```

Q3

write a program to print the following pattern

```
10
10  9
9   8   7
7   6   5   4
```

USE THIS FOR LOOP STRICTLY for the outer loop

```
int row=4;
for(int i =1;j<=row;i++){

}
```

Solution3:

```
class Solution3{

    public static void main(String []args){

        int row=4;
        int n=10;
        for(int i =1;j<=row;i++){

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

                System.out.print(n-- + " ");           //first prints and then decrements

            }
            n++;
            System.out.println();
        }

    }
}
```

Q4

write a program to print the following pattern

```
1    2    3    4
2    3    4
3    4
4
```

```
int row=4;
for(int i =1;i<=row;i++){

}
```

Solution4:

```
class Solution4{

    public static void main(String []args){

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

            int temp=i;

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

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

            }
            System.out.println();
        }

    }

}
```

Q5

write a program to print the following pattern

```
A   B   C   D
B   C   D
C   D
D
```

```
int row=4;
for(int i =1;j<=row;i++){

}
```

Solution5:

```
class Solution5{

    public static void main(String []args){

        int row=4;
        char ch='A';
        for(int i =1;j<=row;i++){

            char temp=ch;

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

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

            }
            ch++;
            System.out.println();

        }

    }

}
```

Q6

write a program to print the following pattern

```
1
2  3
3  4  5
4  5  6  7
```

USE THIS FOR LOOP STRICTLY for the outer loop

```
int row=4;
```

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

```
}
```

Solution6:

```
class Solution6{
```

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

```
        int row=4;
```

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

```
            int temp=i;
```

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

```
                System.out.print(temp+" ");
```

```
                temp++;
```

```
            }
```

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

```
        }
```

```
    }
```

```
}
```

Q7

write a program to print the following pattern

```
F
```

```
E  1
```

D	2	E			
C	3	D	4		
B	5	C	6	D	
A	7	B	8	C	9

USE THIS FOR LOOP STRICTLY for the outer loop

```
Int row=6;
for(int i =1;i<=row;i++){

}
```

Solution7:

```
class Solution7{

    public static void main(String []args){

        int row=6;
        char ch='F';
        int n=1;
        for(int i =1;i<=row;i++){

            char temp=ch;
            for(int j=1; j<=i; j++){

                if(j%2!=0){
                    System.out.print(temp+" ");
                    temp++;
                }else{
                    System.out.print(n+" ");
                    n++;
                }

            }
            ch--;
            System.out.println();
        }

    }

}
```

Another Solution7:

```

class Solution7{

    public static void main(String []args){

        int row=7;
        int n=1;
        for(int i =1;j<=row;i++){

            int temp=65+row-i;
            for(int j=1; j<=i; j++){

                if(j%2!=0){
                    System.out.print((char)temp + " ");
                    temp++;
                }else{
                    System.out.print(n + " ");
                    n++;
                }
            }
            System.out.println();
        }
    }
}

```

Q8

write a program to print the following pattern

```

10
I   H
7   6   5
D   C   B   A

```

USE THIS FOR LOOP STRICTLY for the outer loop

```

Int row=4;
for(int i =1;j<=row;i++){

}

```


Solution8:

```
class Solution8{

    public static void main(String []args){

        int row=4;
        char ch='J';
        int n= 10;
        for(int i =1;i<=row;i++){

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

                if(i%2==0){

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

                }else{

                    System.out.print(n+" ");
                }
                ch--;
                n--;
            }
            System.out.println();
        }
    }
}
```

Another Solution8:

```
class Solution8{

    public static void main(String []args){

        int row=5;
        int n=row*(row+1)/2;    // (4*(4+1))/2 = 10
        int ch=64+n;
        for(int i =1;i<=row;i++){

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

```

        if(i%2==0){

            System.out.print((char)ch+" ");

        }else{

            System.out.print(n+" ");
        }
        ch--;
        n--;
    }
    System.out.println();
}
}
}

```

Q9

write a program to print the following pattern

```

1
8   9
27  16  125
64  25  216  49

```

USE THIS FOR LOOP STRICTLY for the outer loop

```

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

}

```

Solution9:

```

class Solution9{

    public static void main(String []args){

```

```

int row=4;

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

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

        if(j%2!=0){

            System.out.print(temp*temp*temp+"\t");
        }else{

            System.out.print(temp*temp+"\t");
        }
        temp++;
    }
    System.out.println();
}
}

```

Q10

write a program to print the following pattern

```

1
8   9
9   64  25
64  25  216  49

```

USE THIS FOR LOOP STRICTLY for the outer loop

```

Int row=4;
for(int i =1;j<=row;i++){

}

```

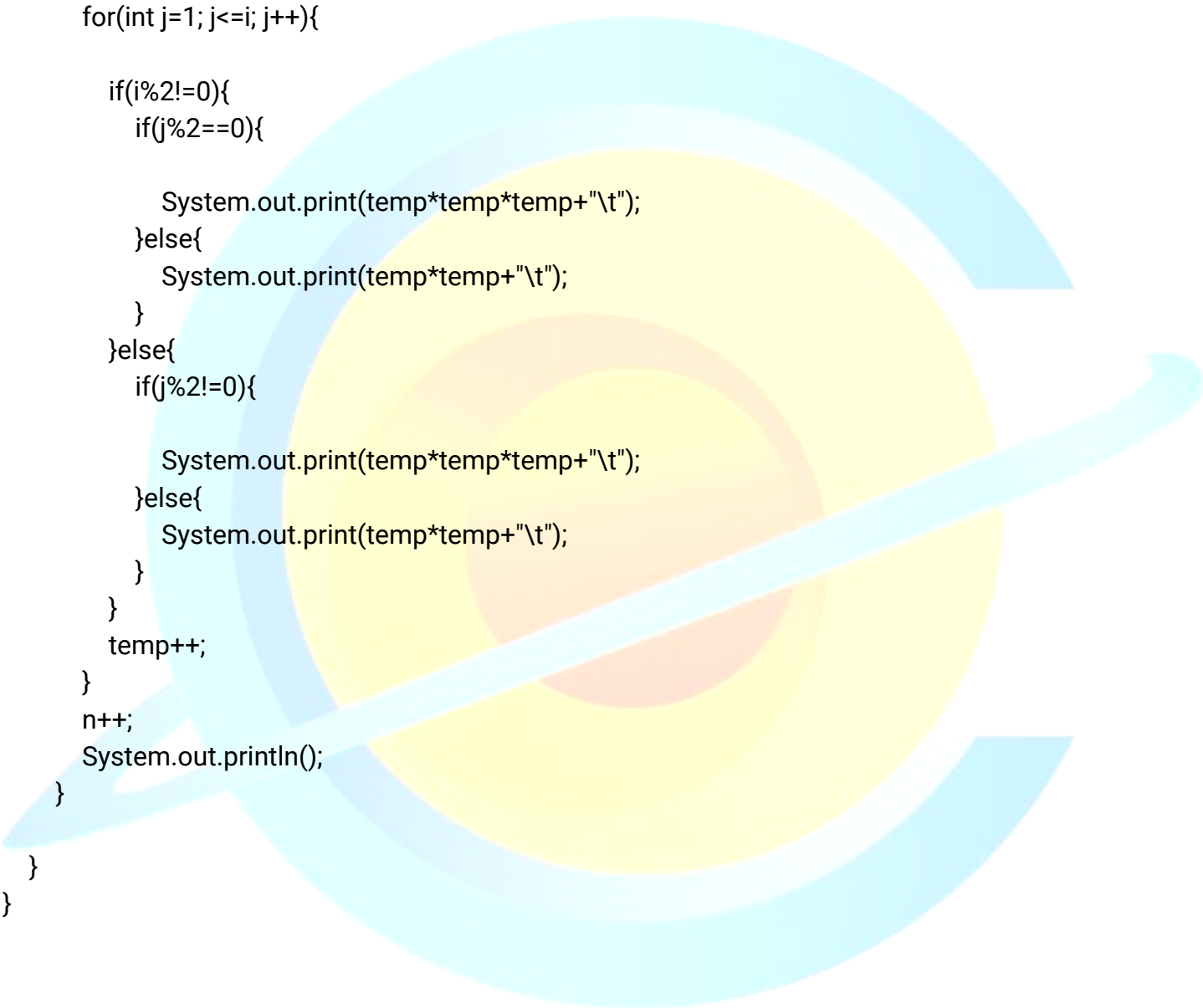
Solution10:

```

class Solution10{

    public static void main(String []args){

```



```

int row=4;
int n=1;
for(int i =1;i<=row;i++){

    int temp=n;

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

        if(i%2!=0){
            if(j%2==0){

                System.out.print(temp*temp*temp+"\t");
            }else{
                System.out.print(temp*temp+"\t");
            }
        }else{
            if(j%2!=0){

                System.out.print(temp*temp*temp+"\t");
            }else{
                System.out.print(temp*temp+"\t");
            }
        }
        temp++;
    }
    n++;
    System.out.println();
}
}

```

Another Solution10: (without using extra variable)

```

class Solution10{

    public static void main(String [] args){

        int row=4;

        for(int i =1;i<=row;i++){

```

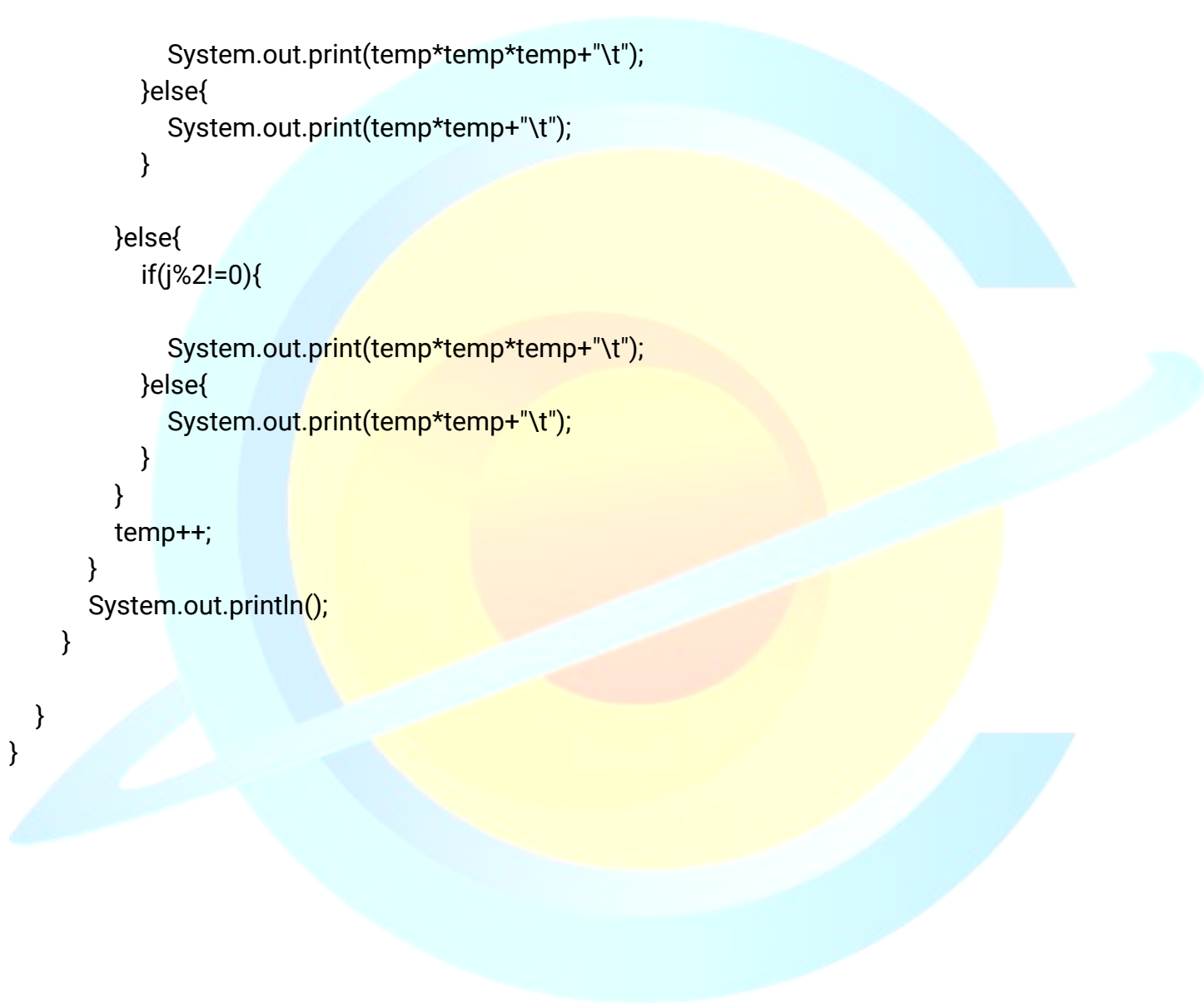
```
int temp= i ;

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

    if(i%2!=0){
        if(j%2==0){

            System.out.print(temp*temp*temp+"\t");
        }else{
            System.out.print(temp*temp+"\t");
        }
    }else{
        if(j%2!=0){

            System.out.print(temp*temp*temp+"\t");
        }else{
            System.out.print(temp*temp+"\t");
        }
    }
    temp++;
}
System.out.println();
}
}
```

A decorative background featuring several concentric circles in shades of yellow and orange, centered on the right side of the page. A thick, light blue diagonal line with a slight gradient crosses the entire image from the bottom-left towards the top-right. The Java code is positioned on the left side, partially overlapping the decorative elements.