**Right angled Triangle patterns 3**

**Question 1:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

1

2 6

3 7 10

4 8 11 13

5 9 12 14 15

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input Must be Greater than Zero or else Print **Invalid Input**.

**Example:**

Input 1  :    5

Output 1:

1

2 6

3 7 10

4 8 11 13

5 9 12 14 15

Input 2  :    -5

Output 2:

Invalid Input

Input 3  :    6

Output 3:

1

2 7

3 8 12

4 9 13 16

5 10 14 17 19

6 11 15 18 20 21

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

if(n<=0)

{

System.out.print("Invalid Input");

}

else

{

for(int i=1;i<=n;i++)

{

int num=i;

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

{

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

num+=(n-j);

}

System.out.println();

}

}

}

}

**Question 2:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

1

3\*2

4\*5\*6

10\*9\*8\*7

11\*12\*13\*14\*15

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- If Given Input Value is Zero then Print **Invalid Input**.

                      If Given Input Value is Negative then convert that value to Positive and then Print Following Pattern.

**Example:**

Input 1  :    5

Output 1:

1

3\*2

4\*5\*6

10\*9\*8\*7

11\*12\*13\*14\*15

Input 2  :    -8

Output 2:

1

3\*2

4\*5\*6

10\*9\*8\*7

11\*12\*13\*14\*15

21\*20\*19\*18\*17\*16

22\*23\*24\*25\*26\*27\*28

36\*35\*34\*33\*32\*31\*30\*29

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int num=1;

if(n==0)

{

System.out.print("Invalid Input");

}

else{

n=Math.abs(n);

int c=0;

int d=0;

for(int i=1;i<=n;i++)

{

c=d+i;

if(i%2==1)

{

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

{

System.out.print(c);

if(j<i)

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

c++;

}

d=c+i;

}

else{

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

{

System.out.print(d);

if(j<i)

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

d--;

}

}

System.out.println();

}

}

}

}

**Question 3:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 7 then Print

            G

          G F

        G F E

      G F E D

    G F E D C

  G F E D C B

G F E D C B A

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- If the Given Input Must be Greater than Zero or else Print **Invalid Input**.

                      If the Given Input is not in a Range of 1 to 26 then Print **Invalid Row Value**.

**Example:**

Input 1  :    7

Output 1:

            G

          G F

        G F E

      G F E D

    G F E D C

  G F E D C B

G F E D C B A

Input 2  :    -4

Output 2:

Invalid Input

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

if(n<=0)

System.out.print("Invalid Input");

else if(n>26)

System.out.print("Invalid Row Value");

else{

char c=(char)(n+64);

for(int i=n;i>=1;i*--)*

{

char ch=c;

for(int j=1;j<=n;j++)

{

if(j>=i)

{

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

ch*--;*

}

else

System.out.print(" ");

}

System.out.println();

}

}

}

}

**Question 4:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

1 2 3 4 5

  2 3 4 5

    3 4 5

      4 5

        5

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input Must be Greater than Zero or else Print **Invalid Input**.

**Example:**

Input 1  :    5

Output 1:

1 2 3 4 5

  2 3 4 5

      3 4 5

      4 5

        5

Input 2  :    -8

Output 2:

Invalid Input

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

if(n<=0)

{

System.out.print("Invalid Input");

}

else

{

for(int i=1;i<=n;i++)

{

for(int j=1;j<=n;j++)

{

if(j<i)

{

if(j<=9)

System.out.print(" ");

else

System.out.print(" ");

}

else

{

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

}

}

System.out.println();

}

}

}

}

**Question 5:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

1

01

010

1010

10101

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input is Zero then Print Invalid Input.

                      Given Input is Negative value then Convert that value to Positive and then Print Following Pattern.

**Example:**

Input 1  :    5

Output 1:

1

01

010

1010

10101

Input 2  :    -6

Output 2:

1

01

010

1010

10101

010101

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int c=1;

if(n==0)

{

System.out.print("Invalid Input");

}

else{

n=Math.abs(n);

for(int i=1;i<=n;i++)

{

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

{

System.out.print(c%2);

c++;

}

System.out.println();

}

}

}

}

**Question 6:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 and 3 then Print

3

44

555

6666

77777

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

                     Second Line of Input Consists of One Integer Value ( Starting Value ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input of Row Value is Must be Greater than Zero and Starting value is greater than or equal to Zero, or else Print **Invalid Inputs**.

                      If Given Row Value is only Less than or equal to Zero then Print **Invalid Row Value**.

                      If Given Starting Value is only Less than Zero then Print **Invalid Starting Value**.

**Example:**

Input 1  :    5 3

Output 1:

3

44

555

6666

77777

Input 2  :    6 -6

Output 2:

Invalid Starting Value

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int c=sc.nextInt();

if(n<=0 && c<0)

System.out.print("Invalid Inputs");

else if(n<=0)

System.out.print("Invalid Row Value");

else if(c<0)

{

System.out.print("Invalid Starting Value");

}

else{

for(int i=1;i<=n;i++)

{

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

{

System.out.print(c);

}

c++;

System.out.println();

}

}

}

}

**Question 7:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

            01

         02 03

      04 05 06

   07 08 09 10

11 12 13 14 15

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input Must be Greater than Zero or else Print **Invalid Input**.

**Example:**

Input 1  :    5

Output 1:

            01

         02 03

      04 05 06

   07 08 09 10

11 12 13 14 15

Input 2  :    -5

Output 2:

Invalid Input

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int c=1;

if(n<=0)

{

System.out.print("Invalid Input");

}

else

{

for(int i=n;i>=1;i*--)*

{

for(int j=1;j<=n;j++)

{

if(j>=i)

{

System.out.printf("%02d ",c);

c++;

}

else{

System.out.print(" ");

}

}

System.out.println();

}

}

}

}

**Question 8:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

%  % % % %

& & & &

% % %

& &

%

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- Given Input Must be Greater than Zero or else Print **Invalid Input**.

**Example:**

Input 1  :    5

Output 1:

% % % % %

& & & &

% % %

& &

%

Input 2  :    -4

Output 2:

Invalid Input

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int c=0;

if(n<=0)

{

System.out.print("Invalid Input");

}

else{

for(int i=n;i>=1;i*--)*

{

c++;

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

{

if(c%2==1)

System.out.print("% ");

else

System.out.print("& ");

}

System.out.println();

}

}

}

}

**Question 9:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 6 then Print

1

1 2

1 2 3

1 2 3 5

1 2 3 5 8

1 2 3 5 8 13

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- If Given Input Value is Zero then Print **Invalid Input**.

                      If Given Input Value is Negative then convert the value to Positive and Print the following Pattern.

**Example:**

Input 1  :    6

Output 1:

1

1 2

1 2 3

1 2 3 5

1 2 3 5 8

1 2 3 5 8 13

Input 2  :    -6

Output 2:

1

1 2

1 2 3

1 2 3 5

1 2 3 5 8

1 2 3 5 8 13

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

if(n==0)

{

System.out.print("Invalid Input");

}

else{

n=Math.abs(n);

for(int i=1;i<=n;i++)

{

int a=1,b=2;

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

{

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

int c=a+b;

a=b;

b=c;

}

System.out.println();

}

}

}

}

**Question 10:**

Report

**Marks: +10-0**

**Description:**

Write a Program to Print the Following Pattern?

If Input is 5 then Print

2

2 3

2 3 5

2 3 5 7

2 3 5 7 11

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value ( Rows ).

Output        :- Print the Given Pattern.

Constraints  :- If Given Input Value is Zero then Print **Invalid Input**.

                      If Given Input Value is Negative then Convert into Positive and then Print Following Pattern.

**Example:**

Input 1  :    5

Output 1:

2

2 3

2 3 5

2 3 5 7

2 3 5 7 11

Input 2  :    -6

Output 2:

2

2 3

2 3 5

2 3 5 7

2 3 5 7 11

2 3 5 7 11 13

**Explanation:**

Print the Following Right angle Triangle Pattern by taking Given Integer Value.

**Your Code: java**

import java.util.Scanner;

class Main

{

public static void main(String []args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

if(n==0)

{

System.out.print("Invalid Input");

}

else{

n=Math.abs(n);

for(int i=1;i<=n;i++)

{

int c=2;

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

{

int fc=0;

for(int k=1;k<=c;k++)

{

if(c%k==0)

fc++;

}

if(fc==2)

{

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

j++;

}

c++;

}

System.out.println();

}

}

}

}