**C & S -3**

**Question 1:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One float Value.

                     Second Line of Input Consists of One float Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    10.7

                  12.1

Output 1:

10.7^2, 10.9^2, 11.1^2,11.3^2, 11.5^2, 11.7^2, 11.9^2, 12.1^2.

Input 2  :    6.1

                  8.9

Output 2:     6.1^2, 6.3^2, 6.5^2, 6.7^2, 6.9^2, 7.1^2, 7.3^2, 7.5^2, 7.7^2, 7.9^2, 8.1^2, 8.3^2, 8.5^2, 8.7^2, 8.9^2.

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Series2

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

float start=sc.nextFloat();

float end=sc.nextFloat();

for(float i=start;i<=end;i+=0.2)

{

System.out.printf("%.1f^2",i);

if(i+0.2<=end)

{

System.out.print(", ");

}else{

System.out.print(".");

}

}

}

}

**Question 2:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

                     Second Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

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

**Example:**

Input 1  :    10

                  31

Output 1:    10^2, 12^2, 14^2, 16^2, 18^2, 20^2, 22^2, 24^2, 26^2, 28^2, 30^2

Input 2  :    -6

                  8

Output 2:     Invalid Inputs

Input 3  :    5

                  27

Output 3:    5^2, 7^2, 9^2, 11^2, 13^2, 15^2, 17^2, 19^2, 21^2, 23^2, 25^2, 27^2

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Value

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a=sc.nextInt();

int b=sc.nextInt();

if(a <=0 || b<= 0)

{

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

}

else

{

for(int i=a;i<=b;i+=2)

{

System.out.print(i+"^"+2);

if(i+2<=b)

{

System.out.print(", ");

}

}

}

}

}

**Question 3:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    10

Output 1:    1, 2, factor of three, 4, 5, factor of three, 7, 8, factor of three, 10

Input 2  :    24

Output 2:    1, 2, factor of three, 4, 5, factor of three, 7, 8, factor of three, 10, 11, factor of three, 13, 14, factor of three, 16, 17, factor of three, 19, 20, factor of three, 22, 23, factor of three.

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Factor{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

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

{

if(i%3==0)

{

System.out.print("factor of three");

}

else{

System.out.print(i);

}

if(i<n){

System.out.print(", ");

}

}

}

}

**Question 4:**

Report

**Marks: +10-0**

**Description:**

Write a program to print following pattern

if input is 10 and -5

output will be 10@9,9@8,8@7,7@6,6@5,5@4,4@3,3@2,2@1,1@0,0@-1,-1@-2,-2@-3,-3@-4,-4@-5,-5@-6

**Constraints:**

**Input :**First line of input contains integer denotes starting range

                     Second line of input contains integer denotes ending range

**Output :**Print pattern

**Example:**

**Input :**10

                        -5

**Output :**10@9,9@8,8@7,7@6,6@5,5@4,4@3,3@2,2@1,1@0,0@-1,-1@-2,-2@-3,-3@-4,-4@-5,-5@-6

**Explanation:**

N/A

**Your Code: java**

import java.util.Scanner;

class Pattern1

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a=sc.nextInt();

int b=sc.nextInt();

if(a>b){

for(int i=a;i>=b;i*--)*

{

System.out.print(i+"@"+(i-1));

if(i-1 >= b)

{

System.out.print(",");

}

}

}

else

{

for(int i=a;i<=b;i++)

{

System.out.print(i+"@"+(i+1));

if(i+1 <=b)

{

System.out.print(",");

}

}

}

}

}

**Question 5:**

Report

**Marks: +10-0**

**Description:**

Write program to **Question 6:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

                     Second Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    10

                  -12

Output 1:

50, 45, 40, 35, 30, 25, 20, 15, 10, 5, 0, (-5), (-10), (-15), (-20), (-25), (-30), (-35), (-40), (-45), (-50), (-55), (-60)

Input 2  :    -6

                  8

Output 2:     (-30), (-25), (-20), (-15), (-10), (-5), 0, 5, 10, 15, 20, 25, 30, 35, 40

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Series3

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a=sc.nextInt();

int b=sc.nextInt();

if(a>b){

for(int i=a;i>=b;i--){

int product=5\*i;

if(product<0)

{

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

}

else{

System.out.print(product);

}

if(i!=b){

System.out.print(", ");

}

}

}else

{

for(int i=a;i<=b;i++)

{

int product=5\*i;

if(product<0){

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

}

else

{

System.out.print(product);

}

if(i!=b){

System.out.print(", ");

}

}

}

}

}

the following series which is shown in Given Examples.

**Constraints:**

Input         :-   First Line Of Input consists of One Integer value.

                      Second Line Of Input consists of One Integer value.

Output       :-   Print the Following Series.

Constraints :-   All the Values Should be Greater than Zero or else print **"Invalid Inputs"**.

**Example:**

Input 1   : 100

                1000

Output 1 : 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000

Input 2   : 300

                2500

Output 2 : 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Seriesno{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a=sc.nextInt();

int b=sc.nextInt();

if(a <= 0 || b <= 0)

{

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

}

else

{

for(int i=a;i<=b;i+=100)

{

System.out.print(i);

if(i<b)

{

System.out.print(", ");

}

}

}

}

}

**Question 7:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

                     Second Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    10

                  -12

Output 1:

5\*10, 5\*9, 5\*8, 5\*7, 5\*6, 5\*5, 5\*4, 5\*3, 5\*2, 5\*1, 5\*0, 5\*(-1), 5\*(-2), 5\*(-3), 5\*(-4), 5\*(-5), 5\*(-6), 5\*(-7), 5\*(-8), 5\*(-9), 5\*(-10), 5\*(-11), 5\*(-12)

Input 2  :    -6

                  8

Output 2:     5\*(-6), 5\*(-5), 5\*(-4), 5\*(-3), 5\*(-2), 5\*(-1), 5\*0, 5\*1, 5\*2, 5\*3, 5\*4, 5\*5, 5\*6, 5\*7, 5\*8

Input 3  :    5

                  8

Output 3:    5\*5, 5\*6, 5\*7, 5\*8

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Series2{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a=sc.nextInt();

int b=sc.nextInt();

if(a>b){

for(int i=a;i>=b;i*--)*

{

if(i<0){

System.out.print("5\*("+i+")");

}

else{

System.out.print("5\*"+i);

} if(i>b){

System.out.print(", ");

}

}

}

else{

for(int i=a;i<=b;i++)

{

if(i<0){

System.out.print("5\*("+i+")");

}

else{

System.out.print("5\*"+i);

}

if(i<b){

System.out.print(", ");

}

}

}

}

}

**Question 8:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

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

**Example:**

Input 1  :    10

Output 1:    5, 10, 5, 10, 5, 10, 5, 10, 5, 10

Input 2  :    -6

Output 2:     Invalid Input

Input 3  :    5

Output 3:    5, 10, 5, 10, 5

**Explanation:**

Print 5 and 10 Alternatively

**Your Code: java**

import java.util.Scanner;

class Series4{

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=0;i<n;i++)

{

if(i%2==0){

System.out.print("5");

}

else{

System.out.print("10");

}

if(i!=n-1){

System.out.print(", ");

}

}

}

}

}

**Question 9:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    36

Output 1:    1, even, 3, even, 5, even, 7, even, 9, even, 11, even, 13, even, 15, even, 17, even, 19, even, 21, even, 23, even, 25, even, 27, even, 29, even, 31, even, 33, even, 35, even

Input 2  :    9

Output 2:    1, even, 3, even, 5, even, 7, even, 9

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Even{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

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

{

if(i % 2==0){

System.out.print("even");

}

else{

System.out.print(i);

}

if(i!=n){

System.out.print(", ");

}

}

}

}

**Question 10:**

Report

**Marks: +10-0**

**Description:**

Write program to print the following series which is shown in Given Examples.

**Constraints:**

Input          :- First Line of Input Consists of One Integer Value.

Output        :- Print the Following Series.

Constraints  :- No

**Example:**

Input 1  :    25

Output 1:     1, 3, divisible by five, 7, 9, 11, 13, divisible by five, 17, 19, 21, 23, divisible by five

Input 2  :    38

Output 2:    1, 3, divisible by five, 7, 9, 11, 13, divisible by five, 17, 19, 21, 23, divisible by five, 27, 29, 31, 33, divisible by five, 37

**Explanation:**

NA

**Your Code: java**

import java.util.Scanner;

class Divisible{

public static void main(String[] args){

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

for(int i=1;i<=n;i+=2)

{

if(i % 5==0)

{

System.out.print("divisible by five");

}

else{

System.out.print(i);

}

if(i+2<=n){

System.out.print(", ");

}

}

}

}