Assignment - 2

1)

Write a program to print first n odd numbers.

package Secondlab;

import java.util.\*;

public class NoddNumber {

public static void main(String[] args) {

Odd o1 = new Odd();

o1.print();

}

}

class Odd{

int n,i,temp;

Scanner sc = new Scanner(System.in);

void print()

{

System.out.println("Enter Number");

n = sc.nextInt();

for(i=1;i<=(2\*n);i++)

{

if(i%2 == 1)

{

if(temp == n){

break;

}

else

{

System.out.println("Number is:"+i);

}

temp++;

}

}

}

}

2)

Write a program to check that the given number is prime or not.

package Secondlab;

import java.util.\*;

public class PrimeNumber {

public static void main(String[] args) {

Check c1 = new Check();

c1.print();

}

}

class Check{

int n,i = 1,temp = 0;

Scanner sc = new Scanner(System.in);

void print()

{

System.out.println("Enter Number");

n = sc.nextInt();

for(i=2;i<n/2;i++)

{

if(n % i == 0)

{

temp++;

}

}

if(temp == 2)

{

System.out.println("No is prime");

}

else

{

System.out.println("No is Not Prime");

}

}

}

3)

Write a program to draw the given patterns.

1)

package Secondlab;

import java.util.Scanner;

public class Pattern1 {

public static void main(String[] args) {

Abc a1 = new Abc();

a1.print();

}

}

class Abc{

int n,i,j;

Scanner sc = new Scanner(System.in);

void print()

{

System.out.println("Enter number");

n = sc.nextInt();

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

{

System.out.println();

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

{

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

}

}

}

}

2)

import java.util.\*;

public class P2 {

public static void main(String[] args) {

Patt2 p2 = new Patt2();

p2.print();

}

}

class Patt2

{

int i,j,n;

Scanner sc= new Scanner(System.in);

void print()

{

System.out.println("Enter Number:");

n = sc.nextInt();

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

{

System.out.println();

for(j=0;j<=i;j++)

{

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

}

}

}

}

3)

import java.util.Scanner;

public class P3 {

public static void main(String[] args) {

Patt3 p = new Patt3();

p.print();

}

}

class Patt3{

int i,j,n;

Scanner sc = new Scanner(System.in);

void print()

{

System.out.println("Enter Number:");

n = sc.nextInt();

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

{

System.out.println();

for(j=i;j<n;j++)

{

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

}

}

}

}

4)

public class pattern4 {

    public static void main(String[] args) {

        Patt4 p4 = new Patt4();

        p4.print();

    }

}

class Patt4{

    void print()

    {

        int i,j;

        System.out.println();

        for( i = 5 ; i > 0 ; i--) {

            for( j = 1 ; j <= 5 ; j++) {

                if(j < i)

                    System.out.print("  ");

                else

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

            }

            System.out.println();

        }

    }

}

5)

import java.util.\*;

public class P5 {

public static void main(String[] args) {

patte5 p = new patte5();

p.print();

}

}

class patte5{

int i,j,n;

Scanner sc = new Scanner(System.in);

void print()

{

System.out.println("Enter number:");

n = sc.nextInt();

for ( i = n; i > 0; i--) {

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

if (j < i) {

System.out.print(" ");

}

else {

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

}

}

System.out.println();

}

}

}

6)

public class P7 {

// implementing the main method

public static void main(String[] x) {

patt7 p7 = new patt7();

p7.print();

}

}

class patt7 {

void print() {

int k = 5, ast = 0, pos = 1;

System.out.println();

for (int i = 0; i < 5; i++) {

for (int j = 1; j <= 9; j++) {

if (j < k)

System.out.print(" ");

else {

if (ast < pos) {

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

ast++;

}

}

}

k--;

pos = pos + 2;

ast = 0;

System.out.println();

}

// Reverse logic

// Reseting necessary variables

k = 0;

pos = 7;

for (int i = 0; i < 5; i++) {

for (int j = 1; j <= 8; j++) {

if (j <= k + 1)

System.out.print(" ");

else {

if (ast < pos) {

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

ast++;

}

}

}

k++;

pos = pos - 2;

ast = 0;

System.out.println();

}

}

}

7)

public class P7 {

public static void main(String[] x) {

patte7 p7 = new patte7();

p7.print();

}

}

class patte7 {

void print() {

int k = 0, ast = 0, pos = 9;

System.out.println();

for (int i = 0; i < 5; i++) {

for (int j = 1; j <= 10; j++) {

if (j < k + 1)

System.out.print(" ");

else {

if (ast < pos) {

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

ast++;

}

}

}

k++;

pos = pos - 2;

ast = 0;

System.out.println();

}

k = 5;

pos = 3;

}

}

8)

public class P8 {

public static void main(String[] args) {

patt8 p8 = new patt8();

p8.print();

}

}

class patt8 {

void print() {

int n = 1;

System.out.println();

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

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

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

n++;

}

System.out.println();

}

}

}

9)

public class P9 {

public static void main(String[] args) {

patt9 p9 = new patt9();

p9.print();

}

}

class patt9

{

void print()

{

int k = 5, ast = 0, pos = 1;

System.out.println();

for(int i = 0 ; i < 4 ; i++)

{

for(int j = 1 ; j <= 9 ; j++)

{

if(j < k)

System.out.print(" ");

else

{

if(ast < pos)

{

if(ast == 0 || ast == pos - 1)

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

else

System.out.print(" ");

ast++;

}

}

}

k--;

pos = pos + 2;

ast = 0;

System.out.println();

}

for(int i = 0 ; i < 9 ; i++)

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

System.out.println();

}

}

10)

public class p10 {

public static void main(String[] args) {

patt10 p10 = new patt10();

p10.print();

}

}

class patt10 {

void print() {

int i,j;

int k = 5, ast = 0, pos = 1;

// Implementing the program logic

System.out.println();

for ( i = 0; i < 5; i++) {

for ( j = 1; j <= 9; j++) {

if (j < k)

System.out.print(" ");

else {

if (ast < pos) {

if (ast == 0 || ast == pos - 1)

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

else

System.out.print(" ");

ast++;

}

}

}

k--;

pos = pos + 2;

ast = 0;

System.out.println();

k = 0;

pos = 7;

for ( i = 0; i < 5; i++) {

for ( j = 1; j <= 8; j++) {

if (j <= k + 1)

System.out.print(" ");

else {

if (ast < pos) {

if (ast == 0 || ast == pos - 1)

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

else

System.out.print(" ");

ast++;

}

}

}

k++;

pos = pos - 2;

ast = 0;

System.out.println();

}

}

}

}