***1.Program***

import java.util.\*;

public class Main

{

static void add()

{

int a,b,c;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of a and b:");

a=sc.nextInt();

b=sc.nextInt();

c=a+b;

System.out.println("sum is:"+c);

}

public static void main(String[] args) {

add();

}

}

***2.factorial no para no return***

import java.util.\*;

public class Main

{

static void fact()

{

int n,i,f1=1;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of n:");

n=sc.nextInt();

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

f1=f1\*i;

System.out.println("factorial is:"+f1);

}

public static void main(String[] args) {

fact();

}

}

***Output:***

enter the value of n:

5

factorial is:120

***3. factorial no para with return.***

import java.util.\*;

public class Main {

public static int calculateFactorial() {

int number;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

number=sc.nextInt();

int factorial = 1;

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

factorial \*= i;

}

return factorial;

}

public static void main(String[] args) {

int result = calculateFactorial();

System.out.println("The factorial is: " + result);

}

}

***Output:***

enter the value of number:

5

The factorial is: 120

***4. prime using function***

import java.util.\*;

public class Main {

static void prime() {

int number,flag=0,i;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

number=sc.nextInt();

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

{

if(number%2==0)

{

flag=1;

break;

}

}

if(flag==0)

{

System.out.println("number is prime");

}

else{

System.out.println("number is not prime");

}

}

public static void main(String[] args) {

prime();

}

}

***Output:***

enter the value of number:

5

number is prime

***5.prime using no parameter with return value***

import java.util.\*;

public class Main {

public static String prime() {

int number,flag=0,i;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

number=sc.nextInt();

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

{

if(number%2==0)

{

flag=1;

break;

}

}

if(flag==0)

{

return "number is prime" ;

}

else{

return "number is not prime";

}

}

public static void main(String[] args) {

String s1=prime();

System.out.println(" "+s1);

}

}

***Output:***

enter the value of number:

4

number is not prime

***6. Armstrong***

import java.util.\*;

public class Main {

static void armstrong() {

int n,n1,i,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

p=n;

while(n>0)

{

n1=n%10;

n=n/10;

sum=sum+n1\*n1\*n1;

}

if(sum==p)

{

System.out.println("number is armstrong") ;

}

else{

System.out.println("number is not armstrong") ;

}

}

public static void main(String[] args) {

armstrong();

}

}

***Output:***

enter the value of number:

153

number is Armstrong

***7. Armstrong using with parameter no return***

import java.util.\*;

public class Main {

public static String armstrong() {

int n,n1,i,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

p=n;

while(n>0)

{

n1=n%10;

n=n/10;

sum=sum+n1\*n1\*n1;

}

if(sum==p)

{

return "number is armstrong" ;

}

else{

return "number is not armstrong";

}

}

public static void main(String[] args) {

String s1=armstrong();

System.out.println(" "+s1);

}

}

***Output:***

enter the value of number:

153

number is Armstrong

***8.disarium***

import java.util.\*;

public class Main {

static void disarium() {

int n,n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

p=n;

while(p>0)

{

rev=p%10;

s=s\*10+rev;

p=p/10;

}

while(s>0)

{

res=s%10;

i++;

sum=sum+(int)Math.pow(res,i);

s=s/10;

}

if(sum==n){

System.out.println(n+" is a disarium number");

}

else{

System.out.println(n+" is not disarium number");

}

}

public static void main(String[] args) {

disarium();

}

}

***Output:***

enter the value of number:

135

135 is a disarium number

***9. disarium using no parameter with return value.***

import java.util.\*;

public class Main {

public static String disarium() {

int n,n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

p=n;

while(p>0)

{

rev=p%10;

s=s\*10+rev;

p=p/10;

}

while(s>0)

{

res=s%10;

i++;

sum=sum+(int)Math.pow(res,i);

s=s/10;

}

if(sum==n){

return n+" is a disarium number";

}

else{

return n+" is not disarium number";

}

}

public static void main(String[] args) {

String d1=disarium();

System.out.println(" "+d1);

}

}

***Output:***

enter the value of number:

135

135 is a disarium number

***10.max from an array***

import java.util.\*;

public class Main {

private static int[] numbers = {3, 5, 7, 2, 8, -1, 4, 10, 12};

public static int findMax() {

int max = numbers[0];

for (int i = 1; i < numbers.length; i++) {

if (numbers[i] > max) {

max = numbers[i];

}

}

return max;

}

public static void main(String[] args) {

int maxValue = findMax();

System.out.println("The maximum value in the array is: " + maxValue);

}

}

***Output:***

The maximum value in the array is: 12

***11. max from an array using no parameter with return value***

public class Main {

public static void main(String[] args) {

int[] numbers = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};

findMax(numbers);

}

public static void findMax(int[] arr) {

int max = arr[0];

for (int i = 1; i < arr.length; i++) {

if (arr[i] > max) {

max = arr[i];

}

}

System.out.println("The maximum value in the array is: " + max);

}

}

***Output:***

The maximum value in the array is: 10

***12.area of circle.***

import java.util.\*;

public class Main

{

static void circle()

{

double r,area;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of radius:");

r=sc.nextInt();

area=3.14\*r\*r;

System.out.println("area is:"+area);

}

public static void main(String[] args) {

circle();

}

}

***Output:***

enter the value of radius:

3

area is:28.259999999999998

***13. area of circle using no parameter and with return value.***

import java.util.\*;

public class Main

{

public static double circle()

{

double r,area=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of radius:");

r=sc.nextInt();

area=3.14\*r\*r;

return area;

}

public static void main(String[] args) {

double c1 = circle();

System.out.println("area is:"+c1);

}

}

***Output:***

enter the value of radius:

3

area is:28.259999999999998

***14.swap***

import java.util.\*;

public class Main

{

static void swap()

{

int a,b,temp;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of a and b:");

a=sc.nextInt();

b=sc.nextInt();

temp=a;

a=b;

b=temp;

System.out.println("a:"+a );

System.out.println("b:"+b );

}

public static void main(String[] args) {

swap();

}

}

***Output:***

enter the value of a and b:

4

5

a:5

b:4

***15. swap using no parameter with return value.***

import java.util.\*;

public class Main {

static int[] swapValuesUsingThirdVariable()

{

int m = 9, n = 5;

int temp = m;

m = n;

n = temp;

int []a=new int[2];

a[0]=m;

a[1]=n;

return a;

}

static int[] pronic\_r() {

int i,n,f,p,k=0;

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

Scanner sc=new Scanner(System.in);

n=sc.nextInt();

int []a=new int[n];

int []b=new int[n];

System.out.println("Enter "+n+" values");

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

a[i]=sc.nextInt();

}

int flag;

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

p=a[j];

flag=0;

for(i=1;i<p;i++) {

f=i\*(i+1);

if(f==p) {

flag=1;

break;

}

}

if(flag==1)

b[k++]=a[j];

}

return b;

}

public static void main(String[] args)

{

int []a=new int[2];

a=swapValuesUsingThirdVariable();

System.out.println("a="+a[0]+"b="+a[1]);

}

}

***Output:***

a=5 b=9

***16.Print pronic number of array.***

import java.util.\*;

public class Main {

static int[] pronic\_r() {

int i,n,f,p,k=0;

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

Scanner sc=new Scanner(System.in);

n=sc.nextInt();

int []a=new int[n];

int []b=new int[n];

System.out.println("Enter "+n+" values");

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

a[i]=sc.nextInt();

}

int flag;

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

p=a[j];

flag=0;

for(i=1;i<p;i++) {

f=i\*(i+1);

if(f==p) {

flag=1;

break;

}

}

if(flag==1)

b[k++]=a[j];

}

return b;

}

public static void main(String[] args)

{

int []a1=new int[20];

a1=pronic\_r();

System.out.println("Pronic");

for(int i=0;i<a1.length;i++)

System.out.println(""+a1[i]);

}

}

***Output:***

Enter n

5

Enter 5 values

4

5

1

2

6

Pronic

2

6

0

0

0

***17. Print pronic number of array. Using no parameter with return value***

import java.util.\*;

public class Main {

static void pronic\_r() {

Scanner in = new Scanner(System.in);

System.out.print("Enter the number to check: ");

int num = in.nextInt();

boolean isPronic = false;

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

if (i \* (i + 1) == num) {

isPronic = true;

break;

}

}

if (isPronic)

System.out.println(num + " is a pronic number");

else

System.out.println(num + " is not a pronic number");

}

public static void main (String[] args){

pronic\_r();

}

}

***Output:***

Enter the number to check: 20

20 is a pronic number

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***18.factorial using with parameter no return value.***

import java.util.\*;

public class Main {

static void fact(int n)

{

int i,f1=1;

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

{

f1=f1\*i;

}

System.out.println("fact =" +f1);

}

public static void main(String[] args)

{

int n;

Scanner sc=new Scanner(System.in);

System.out.println("enter the number:");

n=sc.nextInt();

fact(n);

}

}

***Output:***

enter the number:

5

fact =120

***19. factorial using with parameter with return value.***

import java.util.\*;

public class Main {

public static int fact(int n)

{

int i,f1=1;

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

{

f1=f1\*i;

}

return (f1);

}

public static void main(String[] args)

{

int n,f1;

Scanner sc=new Scanner(System.in);

System.out.println("enter the number:");

n=sc.nextInt();

f1=fact(n);

System.out.println("fact is:"+f1);

}

}

***Output:***

enter the number:

5

fact is:120

***20.prime using with parameter no return value.***

import java.util.\*;

public class Main {

static void prime(int n)

{

int i,flag=0;

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

{

if(n%i==0)

{

flag=1;

break;

}

}

if(flag==0)

{

System.out.println("number is prime");

}

else{

System.out.println("number is not prime");

}

}

public static void main(String[] args)

{

int n,f1;

Scanner sc=new Scanner(System.in);

System.out.println("enter the number:");

n=sc.nextInt();

prime(n);

}

}

***Output:***

enter the number:

5

number is prime

***21.prime using with parameter with return value***

import java.util.\*;

public class Main {

public static String prime(int n)

{

int i,flag=0;

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

{

if(n%i==0)

{

flag=1;

break;

}

}

if(flag==0)

{

return "number is prime";

}

else{

return "number is not prime";

}

}

public static void main(String[] args)

{

int n,f1;

Scanner sc=new Scanner(System.in);

System.out.println("enter the number:");

n=sc.nextInt();

System.out.println(" "+prime(n));

}

}

***Output:***

enter the number:

5

number is prime

***22 .armstrong using with parameter no return value***

import java.util.\*;

public class Main {

static void armstrong(int n) {

int p,sum=0,n1;

p=n;

while(n>0)

{

n1=n%10;

n=n/10;

sum=sum+n1\*n1\*n1;

}

if(sum==p)

{

System.out.println("number is armstrong") ;

}

else{

System.out.println("number is not armstrong") ;

}

}

public static void main(String[] args) {

int n;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

armstrong(n);

}

}

***Output:***

enter the value of number:

153

number is Armstrong

***23.armstrong with parameter with returen value.***

import java.util.\*;

public class Main {

static String armstrong(int n) {

int p,sum=0,n1;

p=n;

while(n>0)

{

n1=n%10;

n=n/10;

sum=sum+n1\*n1\*n1;

}

if(sum==p)

{

return "number is armstrong" ;

}

else{

return "number is not armstrong" ;

}

}

public static void main(String[] args) {

int n;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

System.out.println(" "+armstrong(n));

}

}

***Output:***

enter the value of number:

2

number is not Armstrong

***24. Dissarium using with parameter no return value.***

import java.util.\*;

public class Main {

static void disarium(int n) {

int n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

p=n;

while(p>0)

{

rev=p%10;

s=s\*10+rev;

p=p/10;

}

while(s>0)

{

res=s%10;

i++;

sum=sum+(int)Math.pow(res,i);

s=s/10;

}

if(sum==n){

System.out.println(n+" is a disarium number");

}

else{

System.out.println(n+" is not disarium number");

}

}

public static void main(String[] args) {

int n,n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

disarium(n);

}

}

***Output:***

enter the value of number:

145

145 is not disarium number

***25. Dissarium using with parameter with return value.***

import java.util.\*;

public class Main {

public static String disarium(int n) {

int n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

p=n;

while(p>0)

{

rev=p%10;

s=s\*10+rev;

p=p/10;

}

while(s>0)

{

res=s%10;

i++;

sum=sum+(int)Math.pow(res,i);

s=s/10;

}

if(sum==n){

return n+" is a disarium number";

}

else{

return n+" is not disarium number";

}

}

public static void main(String[] args) {

int n,n1,i=0,rev=0,res=0,s=0,sum=0,p=0;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

n=sc.nextInt();

System.out.println(" "+disarium(n));

}

}

***Output:***

enter the value of number:

135

135 is a disarium number

***26.area of circle using with parameter with return value.***

import java.util.\*;

public class Main

{

static double circle(double r)

{

double area;

area=3.14\*r\*r;

return area;

}

public static void main(String[] args) {

double r,area;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of radius:");

r=sc.nextDouble();

System.out.println("area is: "+circle(r));

}

}

***Output:***

enter the value of radius:

5

area is: 78.5

***27. area of circle using with parameter no return value.***

import java.util.\*;

public class Main

{

static void circle(double r)

{

double area;

area=3.14\*r\*r;

System.out.println("area is:"+area);

}

public static void main(String[] args) {

double r,area;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of radius:");

r=sc.nextDouble();

circle(r);

}

}

***Output:***

enter the value of radius:

5

area is:78.5

***28.swap using with parameter no return value.***

import java.util.\*;

public class Main {

static void swapValuesUsingThirdVariable(int m, int n)

{

int temp = m;

m = n;

n = temp;

int []a=new int[2];

a[0]=m;

a[1]=n;

System.out.println("a="+a[0] +"b="+a[1]);

}

public static void main(String[] args)

{

int m = 9, n = 5;

swapValuesUsingThirdVariable();

}

}

***29. swap using with parameter with return value.***

public class Main {

public static int[] swap(int a, int b) {

int temp = a;

a = b;

b = temp;

return new int[]{a, b};

}

public static void main(String[] args) {

int x = 5;

int y = 10;

int[] swappedValues = swap(x, y);

x = swappedValues[0];

y = swappedValues[1];

System.out.println("After swapping:");

System.out.println("x = " + x + ", y = " + y);

}

}

***Output:***

After swapping:

x = 10, y = 5x = 10, y = 5

***30. pronic number on array using with parameter no return value.***

import java.util.\*;

public class Main {

static void pronic\_r(int num) {

boolean isPronic = false;

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

if (i \* (i + 1) == num) {

isPronic = true;

break;

}

}

if (isPronic)

System.out.println(num + " is a pronic number");

else

System.out.println(num + " is not a pronic number");

}

public static void main (String[] args){

Scanner in = new Scanner(System.in);

System.out.print("Enter the number to check: ");

int num = in.nextInt();

pronic\_r(num);

}

}

***Output:***

Enter the number to check: 35

35 is not a pronic number

***31. pronic number on array using with parameter with return value.***

import java.util.\*;

public class Main {

static String pronic\_r(int num) {

boolean isPronic = false;

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

if (i \* (i + 1) == num) {

isPronic = true;

break;

}

}

if (isPronic)

return num + " is a pronic number";

else

return num + " is not a pronic number";

}

public static void main (String[] args){

Scanner in = new Scanner(System.in);

System.out.print("Enter the number to check: ");

int num = in.nextInt();

System.out.println(" "+pronic\_r(num));

}

}

***Output:***

Enter the number to check: 56

56 is a pronic number

***32. write a java program of max number in array using with parameter and no return value.***

public class Main {

public static void main(String[] args) {

int[] numbers = {3, 5, 7, 2, 8, 6, 4, 10, 1};

findAndPrintMax(numbers);

}

public static void findAndPrintMax(int[] array) {

if (array == null || array.length == 0) {

System.out.println("Array is empty or null.");

return;

}

int max = array[0];

for (int i = 1; i < array.length; i++) {

if (array[i] > max) {

max = array[i];

}

}

System.out.println("The maximum number in the array is: " + max);

}

}

***Output:***

The maximum number in the array is: 10

***33. write a java program of max number in array using with parameter and no return value.***

public class Main {

public static int findMax(int[] numbers) {

int max = numbers[0];

for (int i = 1; i < numbers.length; i++) {

if (numbers[i] > max) {

max = numbers[i];

}

}

return max;

}

public static void main(String[] args) {

int[] numbers = {3, 5, 7, 2, 8, -1, 4, 10, 12};

int maxNumber = findMax(numbers);

System.out.println("The maximum number in the array is: " + maxNumber);

}

}

***Output:***

The maximum number in the array is: 12

###############\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*18-july-2024\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*####################

***34.write a java program of using four function.***

import java.util.\*;

public class Main

{

static void sub1()

{

int a,b,c;

Scanner sc=new Scanner(System.in);

System.out.println("Enter two numbers:");

a=sc.nextInt();

b=sc.nextInt();

c=a-b;

System.out.println("sub="+c);

}

static int sub2()

{

int a,b,c;

Scanner sc=new Scanner(System.in);

System.out.println("Enter two numbers:");

a=sc.nextInt();

b=sc.nextInt();

c=a-b;

return c;

}

static void sub3(int a,int b)

{

int c;

c=a-b;

System.out.println("Sub="+c);

}

static int sub4(int a,int b)

{

int c;

c=a-b;

return c;

}

public static void main(String[] args)

{

int a,b;

sub1();

int c=sub2();

System.out.println("sub="+c);

Scanner sc=new Scanner(System.in);

System.out.println("Enter two numbers:");

a=sc.nextInt();

b=sc.nextInt();

sub3(a,b);

c=sub4(a,b);

System.out.println("sub="+c);

}

}

***Output:***

Enter two numbers:

2

4

sub=-2

Enter two numbers:

5

7

sub=-2

Enter two numbers:

2

6

Sub=-4

sub=-4

***35.java progam of sum of digit using four function.***

import java.util.\*;

public class Main

{

static void sum() {

int n1,sum=0;

Scanner sc = new Scanner(System.in);

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

int n=sc.nextInt();

while(n>0) {

n1=n%10;

sum+=n1;

n=n/10;

}

System.out.println("Sum "+sum);

}

static void sum\_p(int n) {

int n1,sum=0;

while(n>0) {

n1=n%10;

sum+=n1;

n=n/10;

}

System.out.println("Sum "+sum);

}

static int sum\_r() {

int n1,sum=0;

Scanner sc = new Scanner(System.in);

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

int n=sc.nextInt();

while(n>0) {

n1=n%10;

sum+=n1;

n=n/10;

}

return sum;

}

static int sum\_pr(int n) {

int n1,sum=0;

while(n>0) {

n1=n%10;

sum+=n1;

n=n/10;

}

return sum;

}

public static void main(String[] args) {

int ch,n;

do{

Scanner sc = new Scanner(System.in);

System.out.println("1.No para No return\n2.With para No return\n3.No para With return\n4.With para With return\n5.Exit");

ch=sc.nextInt();

switch(ch) {

case 1:

sum();

break;

case 2:

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

n=sc.nextInt();

sum\_p(n);

break;

case 3:

System.out.println("Sum "+sum\_r());

break;

case 4:

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

n=sc.nextInt();

System.out.println("Sum "+sum\_pr(n));

break;

case 5:

System.exit(1);

break;

default:

System.out.println("Enter Valid options");

break;

}

}while(true);

}

}

***Output:***

1.No para No return

2.With para No return

3.No para With return

4.With para With return

5.Exit

3

Enter number

123

Sum 6

1.No para No return

2.With para No return

3.No para With return

4.With para With return

5.Exit

***36.prime***

import java.util.\*;

public class Main

{

static void prime() {

int number,flag=0,i;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

number=sc.nextInt();

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

{

if(number%2==0)

{

flag=1;

break;

}

}

if(flag==0)

{

System.out.println("number is prime");

}

else{

System.out.println("number is not prime");

}

}

public static String prime1()

{

int number,flag=0,i;

Scanner sc=new Scanner(System.in);

System.out.println("enter the value of number:");

number=sc.nextInt();

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

{

if(number%2==0)

{

flag=1;

break;

}

}

if(flag==0)

{

return "number is prime" ;

}

else{

return "number is not prime";

}

}

static void prime2(int n)

{

int i,flag=0;

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

{

if(n%i==0)

{

flag=1;

break;

}

}

if(flag==0)

{

System.out.println("number is prime");

}

else{

System.out.println("number is not prime");

}

}

public static String prime3(int n)

{

int i,flag=0;

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

{

if(n%i==0)

{

flag=1;

break;

}

}

if(flag==0)

{

return "number is prime";

}

else{

return "number is not prime";

}

}

public static void main(String[] args)

{

int choice;

do

{

Scanner sc=new Scanner(System.in);

System.out.println("1. no para no return \n2. no para with return \n 3.with para no return \n 4.with parameter with return");

choice =sc.nextInt();

switch(choice)

{

case 1:

prime();

break;

case 2:

String s1=prime1();

System.out.println(" "+s1);

break;

case 3:

int n,f1;

System.out.println("enter the number:");

n=sc.nextInt();

prime2(n);

break;

case 4:

n=sc.nextInt();

System.out.println(" "+prime3(n));

break;

default:

System.out.println("Enter Valid options");

break;

}

}while(true);

}

}

***Output:***

1. no para no return

2. no para with return

3.with para no return

4.with parameter with return

1

enter the value of number:

5

number is prime

1. no para no return

2. no para with return

3.with para no return

4.with parameter with return

***37. array max***

import java.util.\*;

public class Main

{

private static int[] numbers = {3, 5, 7, 2, 8, -1, 4, 10, 12};

public static int findMax() {

int max = numbers[0];

for (int i = 1; i < numbers.length; i++) {

if (numbers[i] > max) {

max = numbers[i];

}

}

return max;

}

public static void findMax(int[] arr) {

int max = arr[0];

for (int i = 1; i < arr.length; i++) {

if (arr[i] > max) {

max = arr[i];

}

}

System.out.println("The maximum value in the array is: " + max);

}

public static void main(String[] args) {

int ch,n;

do{

Scanner sc = new Scanner(System.in);

System.out.println("1.No para No return\n2.With para No return\n3.No para With return\n4.With para With return\n5.Exit");

ch=sc.nextInt();

switch(ch) {

case 1:

int maxValue = findMax();

System.out.println("The maximum value in the array is: " + maxValue);

break;

case 2:

int[] numbers = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};

findMax(numbers);

break;

case 5:

System.exit(1);

break;

default:

System.out.println("Enter Valid options");

break;

}

}while(true);

}

}

***Output:***

1.No para No return

2.With para No return

3.No para With return

4.With para With return

5.Exit

1

The maximum value in the array is: 12

1.No para No return

2.With para No return

3.No para With return

4.With para With return

5.Exit

***38.four different in one pargram.***

import java.util.\*;

class Multi

{

static void pattern()

{

int n;

Scanner sc =new Scanner (System.in);

System.out.println("Enter value of n");

n=sc.nextInt();

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

{

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

{

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

}

System.out.println();

}

}

static void prime(int n)

{

int i,flag=0;

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

{

if(n%i==0)

{

flag=1;

break;

}

}

if(flag==0)

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

else

System.out.println("No is not prime");

}

static String pal()

{

int n,i,sum=0,n1,p;

Scanner sc =new Scanner (System.in);

System.out.println("Enter value of n");

n=sc.nextInt();

p=n;

while(p>0)

{

n1=p%10;

p=p/10;

sum=(sum\*10)+n1;

}

if(sum==n)

return "No is pal";

else

return "No is not pal";

}

static int power(int x,int n)

{

int f1=1,i;

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

{

f1=f1\*x;

}

return (f1);

}

public static void main(String[] args)

{

int n,x;

Scanner sc =new Scanner (System.in);

pattern();

System.out.println("Enter value of n");

n=sc.nextInt();

prime(n);

String s1=pal();

System.out.println(""+s1);

System.out.println("Enter value of n");

n=sc.nextInt();

System.out.println("Enter value of x");

x=sc.nextInt();

System.out.println("Power"+power(x,n));

}

}

***Output:***

Enter value of n

3

1

12

123

Enter value of n

4

No is not prime

Enter value of n

5

No is pal

Enter value of n

6

Enter value of x

2

Power64