[10 Mark Questions of Java]

**Q.1 Write a JAVA program to print the following pattern.**

**1**

**2 2**

**3 3 3**

**4 4 4 4**

public class Main

{

public static void main(String[] args)

{

int i, j;

for(i=1;i<=4;i++)

{

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

{

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

}

System.out.println();

}

}

}

**Q.2 Write a JAVA program to print the following pattern.**

**1**

**1 2**

**1 2 3**

**1 2 3 4**

**1 2 3 4 5**

public class Main

{

public static void main(String args[])

{

int i, j,n;

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

{

n=1;

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

{

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

n++;

}

System.out.println();

}

}

}

**Q.3 Write a JAVA program to print the following pattern.**

**5 4 3 2 1**

**4 3 2 1**

**3 2 1**

**2 1**

**1**

public class Main

{

public static void main(String[] args)

{

int i, j;

for(i=5;i>=1;i--)

{

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

{

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

}

System.out.println();

}

}

}

**Q.4 Write a java program to calculate the area and perimeter of square.**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int s;

float area,perimeter;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter side of Square:");

s=Integer.parseInt(br.readLine());

area=s\*s;

perimeter=4\*s;

System.out.println("Area of Square:"+area);

System.out.println("Perimeter of Square:"+perimeter);

}

}

**Q.5 Write a JAVA program to print the following pattern.**

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**\*\*\***

**\*\*\*\***

**\*\*\*\*\***

public class Main

{

public static void main(String args[])

{

int i, j;

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

{

for (j=5-i; j>1; j--)

{

System.out.print(" ");

}

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

{

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

}

System.out.println();

}

}

}

**Q.6 Write a JAVA program to print the following pattern.**

**\***

**\*\***

**\*\*\***

**\*\*\*\***

**\*\*\*\*\***

public class Main

{

public static void main(String args[])

{

int i, j;

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

{

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

{

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

}

System.out.println();

}

}

}

**Q.7 Write the JAVA program to calculate the addition of 5 numbers using array.**

public class Main

{

public static void main(String[] args)

{

int [] arr = new int [] {2,4,6,8,10};

int sum = 0;

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

{

sum = sum + arr[i];

}

System.out.println("Sum of all the elements of an array: " + sum);

}

}

**Q.8 Write a JAVA program to calculate area and perimeter of a rectangle.**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int l,b;

double area,perimeter;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter length of rectangle:");

l=Integer.parseInt(br.readLine());

System.out.println("Enter breadth of rectangle:");

b=Integer.parseInt(br.readLine());

area=l\*b;

perimeter=2\*(l\*b);

System.out.println("Area of Rectangle:"+area);

System.out.println("Perimeter of Rectangle:"+perimeter);

}

}

**Q.9 Write a JAVA program to find a factorial of given a number.**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int i,fact=1,n;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

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

n=Integer.parseInt(br.readLine());

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

{

fact=fact\*i;

}

System.out.println("Factorial of "+n+":"+fact);

}

}

**Q.10 Write a JAVA program to check number is a Armstrong or not.**

import java.util.Scanner;

public class Main

{

public static void main(String[] args)

{

int n,count=0,a,rem,temp,sum=0;

Scanner s = new Scanner(System.in);

System.out.print("Enter any integer you want to check:");

n = s.nextInt();

a=n;

temp= n;

while(a > 0)

{

a = a / 10;

count++;

}

while(n > 0)

{

rem= n % 10;

sum = (int) (sum+Math.pow(rem,count));

n = n / 10;

}

if(sum == temp)

{

System.out.println("Given number is Armstrong");

}

else

{

System.out.println("Given number is not Armstrong");

}

}

}

**Q.11 Write a JAVA program to find the reverse of a entered number.**

import java.util.\*;

public class Main

{

public static void main(String[] args)

{

int n,rev=0;

Scanner s=new Scanner(System.in);

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

n=s.nextInt();

while(n!=0)

{

int rem=n%10;

rev=rev\*10+rem;

n=n/10;

}

System.out.println("The reverse of the given number is: " + rev);

}

}

**Q.12 Write a JAVA program to calculate area and circumference of a circle.**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int r;

double PI=3.14;

double area,circumference;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter radius of Circle:");

r=Integer.parseInt(br.readLine());

area=PI\*r\*r;

circumference=2\*PI\*r;

System.out.println("Area of Circle:"+area);

System.out.println("Circumference of Circle:"+circumference);

}

}

**Q.13 Write a java program to accept 5 numbers using command line arguments sort and display them.**

class Main

{

public static void main(String args[])

{

System.out.println(args[0]);

System.out.println(args[1]);

System.out.println(args[2]);

System.out.println(args[3]);

System.out.println(args[4]);

}

}

**Q.14 Write a program to calculate the volume of cylinder.(Volume=pi\*r2\*h)**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int r,h;

double PI=3.14;

double volume;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

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

r=Integer.parseInt(br.readLine());

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

h=Integer.parseInt(br.readLine());

volume=PI\*r\*r\*h;

System.out.println("Volume of Circle:"+volume);

}

}

**Q.15 Write a JAVA program to accept three dimensions length (l), breadth(b) and height(h) of a cuboid and print surface area (surface area=2(lb+lh+bh)).**

import java.io.\*;

public class Main

{

public static void main(String[] args) throws IOException

{

int l,b,h;

double surfacearea;

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

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

l=Integer.parseInt(br.readLine());

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

b=Integer.parseInt(br.readLine());

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

h=Integer.parseInt(br.readLine());

surfacearea=2\*(l\*b+l\*h+b\*h);

System.out.println("Surface Area of Cuboid:"+surfacearea);

}

}

**Q.16 Write a program to print factorial of given number.**

import java.util.\*;

public class Main

{

public static void main(String[] args)

{

int fact=1,n,i;

Scanner s=new Scanner(System.in);

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

n=s.nextInt();

System.out.println("Factorial:");

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

{

fact=fact\*i;

System.out.print(fact+"\t");

}

}

}

**Q.17 Write a JAVA program to find the prime number in between 1 to 50.**

import java.util.Scanner;

class Main

{

public static void main(String arg[])

{

int i,count;

System.out.println("Prime numbers between 1 to 50 are ");

for(int j=2;j<=50;j++)

{

count=0;

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

{

if(j%i==0)

{

count++;

}

}

if(count==2)

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

}

}

}

Q.18 Write a JAVA program to check given number is palindrome or not.

Q.19 Write a program to accept n names of country and display them in descending order.

Q.20 Write a program to display the 1 to 5 tables.

Q.21 Write a JAVA program to accept an array of n integers and display the largest number from array.

Q.22 Write a JAVA program to accept an array of n integers and display the smallest number from array.

Q.23 Write a program to find the cube of given number using function interface.

Q 24 Write a program to read student roll number and name from the console and display them using BufferedReader .

Q 25 Write a program to read employee\_id and employee\_name from the console and display them using Scanner class.

**Q. 26 Write a JAVA program to print the following pattern.**

**1**

**2 3**

**4 5 6**

**7 8 9 10**

public class Main

{

public static void main(String[] args)

{

int i, j, k = 1;

for (i = 1; i <= 4; i++)

{

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

{

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

}

System.out.println();

}

}

}

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| --- | --- | --- |
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|  |  |  |

**Q 27 Write a JAVA program to print the following pattern.**

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**\* \* \***

**\* \***

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public class Main

{

public static void main(String args[])

{

int i, j;

for(i=4;i>0;i--)

{

for(j=i;j>0;j--)

{

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

}

System.out.println();

}

}

}