# **JAVA Assignment**

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Q1.Greatest in an array

public class GreatestNumber

{

public static void main(String [] args)

{

int [] x ={12,456,7,67,7,869,90,23,7};

int max=x[0];

int max2=x[0];

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

{

if(x[i]>max)

max=x[i];

}

System.out.println("Greatest Number is="+max);

}

}

Q2.Smallest in an array

public class SmallestNumber

{

public static void main(String [] args)

{

int [] x ={16,456,7,67,7,869,90,23,7};

int min=x[0];

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

{

if(x[i]<min)

min=x[i];

}

System.out.println("Smallest Number is="+min);

}

}

Q3.Even number up to 20

public class EvenNumber

{

public static void main(String args[])

{

int num=20;

for(int ctr=1;ctr<=num;ctr++)

{

if(ctr%2==0)

{

System.out.println("Number "+ctr+" is a even number");

}

}

}

}

Q4.Odd number up to 20

public class EvenNumber

{

public static void main(String args[])

{

int num=20;

for(int ctr=1;ctr<=num;ctr++)

{

if(ctr%2!=0)

{

System.out.println("Number "+ctr+" is a Odd number");

}

}

}

}

Q5.Second smallest number in array

public class SecondSmallestNumber

{

public static void main(String[]args)

{

int num[]={60,80,30,50,44,12};

int n=num.length;

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

{

for(int j=0;j<n-r;j++)

{

if(num[j]>num[j+1])

{

int temp=num[j];

num[j]=num[j+1];

num[j+1]=temp;

}

}

}

System.out.println("SecondSmallestNumber is "+num[1]);

}

}

Q6.Second Largest number in array

public class SecondLargestNumber

{

public static void main(String[]args)

{

int num[]={60,80,30,50,44,12};

int n=num.length;

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

{

for(int j=0;j<n-r;j++)

{

if(num[j]>num[j+1])

{

int temp=num[j];

num[j]=num[j+1];

num[j+1]=temp;

}

}

}

System.out.println("Second Largest Number is "+num[4]);

}

}

Q7.Factorial of a number

import java.util.\*;

public class Factorial

{

public static void main(String[]args)

{

//Code find factorial of a number

Scanner sc=new Scanner(System.in);

System.out.print("Enter anumber to find factorial: ");

int num=sc.nextInt();

int temporary=num;

for(int ctr=num-1;ctr>=1;ctr--)

{

num=num\*ctr;

}

System.out.println("Factorial of "+temporary+" is "+num);

}

}

Q8. Sum and avg of all digits in array

public class SumAvg

{

public static void main(String[]args)

{

//Code to display the sum of a digit in a single digit

int [] x ={12,456,7,67,7,869,90,23,7};

int sum=0;

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

{

sum=sum+x[i];

}

double avg=sum/x.length;

System.out.println("Average of the number: "+avg);

System.out.println("sum of number in single digit is "+sum);

}

}

Q9.Armstrong number

import java.util.Scanner;

public class ArmstrongNumber

{

public static void main(String[]args)

{

int num,remainder,temp,sum=0;

Scanner sc=new Scanner(System.in);

System.out.println("Enter a three digit Number:-");

num=sc.nextInt();

temp=num;

while(num>0)

{

remainder=num%10;

sum=sum+(remainder\*remainder\*remainder);

num=num/10;

}

if(temp==sum)

System.out.println(+temp+" is a armstrong number");

else

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

}

}

10 . Perfect number

import java.util.Scanner;

public class PerfectNumber

{

public static void main(String[]args)

{

int num,temp,sum=0,x=1;

Scanner sc=new Scanner(System.in);

System.out.println("Enter a three digit Number:-");

num=sc.nextInt();

temp=num;

while(x<=num/2)

{

if(num%x==0)

{

sum=sum+x;

}

x++;

}

if(sum==num)

System.out.println(+temp+" is a Perfect number");

else

System.out.println(+temp+" is not a Perfect number");

}

}

Q11.Fibonacci series

import java.util.\*;

public class FabbonachieSeries

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("Enter First number:");

int x=sc.nextInt();

System.out.print("Enter second number:");

int y=sc.nextInt();

System.out.println(x);

while(y<=20)

{

System.out.println(y);

int z=x+y;

x=y;

y=z;

}

}

}

Q 12. prime

import java.util.\*;

public class Prime

{

public static void main(String args[])

{

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter a number:");

int x=sc.nextInt();

int num=x/2;

if(x==0||x==1)

{

System.out.println(x+" is a prime number");

}

else

{

for(int y=2;2<=num;y++)

{

if(x%y==0)

{

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

flag=1;

break;

}

}

if(flag==0)

System.out.println(x+" is a prime number");

}

}

}

Q 13. pattern 1 22 333 4444

import java.util.\*;

public class NumberPatern1

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("enter a number to print pattern: ");

int num=sc.nextInt();

for(int r=1;r<=num;r++)

{

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

{

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

}

System.out.println();

}

}

}

Q 14. pattern 1 23 456 789

import java.util.\*;

public class NumberPatern2

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("enter a number to print pattern: ");

int num=sc.nextInt();

int count=1;

for(int r=1;r<=num;r++)

{

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

{

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

}

System.out.println();

}

}

}

Q15. Pyramid with stars - half upto

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import java.util.\*;

public class Pyramid1

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("Enter a number to print pattern :");

int num=sc.nextInt();

for(int r=1;r<=num;r++)

{

for(int s=num-r;s>=1;s--)

{

System.out.print(" ");

}

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

{

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

}

for(int c=2;c<=r;c++)

{

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

}

System.out.println();

}

}

}

Q 16. pyramid with stars - half upto

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import java.util.\*;

public class Pyramid2

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("Enter a number to print pattern :");

int num=sc.nextInt();

for(int r=num;r>=1;r--)

{

for(int s=num-r;s>=1;s--)

{

System.out.print(" ");

}

for(int c=1;c<=(2\*r)-1;c++)

{

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

}

System.out.println();

}

}

}

Q 17. count the duplicates in an array

import java.util.Scanner;

public class Duplicacy

{

public static void main(String [] args)

{

int [] x ={12,45,7,67,7,89,90,23,7};

Scanner sc=new Scanner(System.in);

System.out.print("Enter any Number: ");

int num=sc.nextInt();

int count=0;

for(int z:x)

{

if(z==num)

count++;

}

System.out.println("Duplicacy of number "+num+" is "+count);

}

}

Q 18. reverse the number

import java.util.Scanner;

public class ReverseNumber

{

public static void main(String[]args)

{

int num,remainder,reverse=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter a three digit Number:-");

num=sc.nextInt();

int temp=num;

while(num!=0)

{

remainder=num%10;

reverse=reverse\*10+remainder;

num=num/10;

}

System.out.println("Reverse of "+temp+" is "+reverse);

}

}

Q 19. reverse the numbers in an array

public class ArrayReverse

{

public static void main(String [] args)

{

int [] x ={12,45,677,89,90,23};

for(int i=x.length-1;i>=0;i--)

{

System.out.println(x[i]);

}

}

}

Q 20. sort the array in ascending order

public class AscendingOrder

{

public static void main(String[]args)

{

int num[]={60,80,30,50,44,12};

int n=num.length;

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

{

for(int j=0;j<n-r;j++)

{

if(num[j]>num[j+1])

{

int temp=num[j];

num[j]=num[j+1];

num[j+1]=temp;

}

}

}

for(int x:num)

{

System.out.println(x);

}

}

}

*Completed by:-*

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