**Selection Statement**

**1)** import java.util.\*; public class Main{

public static void main(String[] args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter a number:"); int num = sc.nextInt(); switch (num){

case 10: System.out.println("It is 10"); break; case 20: System.out.println("It is 20"); break; case 30: System.out.println("It is 30"); break; default: System.out.println("Please, Enter 10,20 or 30");

}

}

}

**O/P:**

Enter a number:

30

It is 30

**2) Enter number and print day name & day week according to that number.** import java.util.\*;

public class Main{

public static void main(String[] args){

Scanner sc=new Scanner(System.in); int dayNum;

String dayName="",dayWeek=""; System.out.println("Enter day number:"); dayNum=sc.nextInt(); switch(dayNum){

case 1:dayName="Monday";

dayWeek="Weekday";

System.out.println(dayName+" is a "+dayWeek); break;

case 2:dayName="Tuesday";

dayWeek="Weekday";

System.out.println(dayName+" is a "+dayWeek); break;

case 3:dayName="Wednesday";

dayWeek="Weekday";

System.out.println(dayName+" is a "+dayWeek); break;

case 4:dayName="Thursday";

dayWeek="Weekday";

System.out.println(dayName+" is a "+dayWeek); break;

case 5:dayName="Friday";

dayWeek="Weekday";

System.out.println(dayName+" is a "+dayWeek); break;

case 6:dayName="Saturday";

dayWeek="Weekend";

System.out.println(dayName+" is a "+dayWeek); break;

case 7:dayName="Sunday";

dayWeek="Weekend";

System.out.println(dayName+" is a "+dayWeek); break;

default:System.out.println("Invalid number");

break;

}

}

}

**O/P:**

Enter day number:

6

Saturday is a Weekend

**3) 1:Addition**

**2:swap 2 no**

**3:max 2 no**

**4:min 2 no**

**5:exit** import java.util.\*; public class Main

{

public static void main(String[] args) { int a,b,ch;

System.out.println("Enter value of a & b"); Scanner sc=new Scanner(System.in); a=sc.nextInt(); b=sc.nextInt();

do{

System.out.println("1:Addition \n2:Swap \n3:Max \n4:Min \n5:Exit"); System.out.println("Enter U R Choice"); ch=sc.nextInt(); switch(ch){

case 1:System.out.println("Addition="+(a+b));break; case 2:a=a+b;

b=a-b; a=a-b;

System.out.println("a="+a+" "+"b="+b); break;

case 3:if(a>b)

System.out.println(a+" is max"); else if(b>a)

System.out.println(b+" is max"); else

System.out.println("a & b are equals"); break;

case 4:if(a<b)

System.out.println(a+" is min"); else if(b<a)

System.out.println(b+" is min"); else

System.out.println("a & b are equals"); break;

case 5: System.exit(0);

break;

default: System.out.println("Invalid choice");

break;

}

}while (ch<=5);

}

}

**O/p:**

Enter value of a & b

12

3

1:Addition

2:Swap

3:Max

4:Min

5:Exit

Enter U R Choice

1

Addition=15

1:Addition

2:Swap

3:Max

4:Min

5:Exit

Enter U R Choice

2 a=3 b=12

1:Addition

2:Swap

3:Max

4:Min

5:Exit

Enter U R Choice

**4) 1:Area of circle**

**2:Area of triangle**

**3:Area of rectangle**

**4:Kinetic Energy**

import java.util.\*; public class Main

{

public static void main(String[] args) { Scanner sc=new Scanner(System.in); int ch; double r,A,b; do{

System.out.println("1:Area of circle \n2:Area of triangle \n3:Area of rectangle

\n4:Kinetic Energy");

System.out.println("Enter your choice"); ch=sc.nextInt(); switch(ch){ case 1:System.out.println("Enter value of r"); r=sc.nextDouble();

A=3.14\*r\*r;

System.out.println("Area of circle="+A+"\n"); break;

case 2:System.out.println("Enter value of b & h"); b=sc.nextDouble(); double h=sc.nextDouble();

A=0.5\*b\*h;

System.out.println("Area of triangle="+A+"\n"); break;

case 3:System.out.println("Enter value l & w"); double l=sc.nextDouble(); double w=sc.nextDouble();

A=l\*w;

System.out.println("Area of rectangle="+A+"\n");

break;

case 4:System.out.println("Enter value of m & v");

double m=sc.nextDouble(); double v=sc.nextDouble();

A=0.5\*m\*v\*v;

System.out.println("KE="+A+"\n"); break;

default: System.out.println("Invalid Choice");

break;

}

}

while(ch<=4);

}

}

**O/P:**

1:Area of circle

2:Area of triangle

3:Area of rectangle

4:Kinetic Energy

Enter your choice

1

Enter value of r

23

Area of circle=1661.06

1:Area of circle

2:Area of triangle

3:Area of rectangle

4:Kinetic Energy

Enter your choice

5

Invalid Choice

**5) 1:even/odd**

**2:divisible by 17**

**3:divisible by 5 & 7**

**4:divisible by 5 or 7**

**5:leap year or not**

**6:pos/neg**

**7:Calculate electricity bill**

**8:age**

**9:Discount**

**10:pin** import java.util.\*; public class Main

{

public static void main(String[] args) { int n,ch;

Scanner sc=new Scanner(System.in); do{

System.out.println("1:even/odd \n2:divisible by 17 \n3:divisible by 5 & 7

\n4:divisible by 5 or 7 \n5:leap year or not \n6:pos/neg \n7:Calculate electricity bill \n8:age

\n9:Discount \n10:pin");

System.out.println("Enter your choice"); ch=sc.nextInt(); switch(ch){

case 1:System.out.println("Enter a number"); n=sc.nextInt();

System.out.println(n%2==0?"Even\n":"Odd\n"); break;

case 2:System.out.println("Enter a number"); n=sc.nextInt();

System.out.println(n%17==0?"Yes,Divisible by 17\n":"No,Divisible by

17\n"); break;

case 3:System.out.println("Enter a number"); n=sc.nextInt();

System.out.println(n%5==0 && n%7==0?"Yes,Divisible by 5 &

7\n":"No,Divisible by 5 & 7\n");

break;

case 4:System.out.println("Enter a number"); n=sc.nextInt();

System.out.println(n%5==0 || n%7==0?"Yes,Divisible by 5 or

7\n":"No,Divisible by 5 or 7\n"); break;

case 5:System.out.println("Enter Year"); n=sc.nextInt();

System.out.println(n%4==0?"Leap Year\n":"Not Leap Year\n"); break;

case 6:System.out.println("Enter a number"); n=sc.nextInt(); if(n>0)

System.out.println(n+" is Positive number"); else if(n<0)

System.out.println(n+" is Negative number"); else

System.out.println(n+" is Zero"); break;

case 7:System.out.println("Enter Unit"); int unit=sc.nextInt(); double unitcharge,tax,final\_bill,basic\_charge=128.00; if(unit>=0 && unit<=100){ unitcharge=unit\*4.71;

}

else if(unit>=101 && unit<=300){ unitcharge=unit\*10.29;

}

else if(unit>=301 && unit<=500){ unitcharge=unit\*14.55;

}

else{ unitcharge=unit\*16.64;

}

tax=basic\_charge+(unitcharge\*1.17); final\_bill=tax+unitcharge+basic\_charge; System.out.println("Total bill="+final\_bill); break;

case 8:System.out.println("Enter age"); n=sc.nextInt();

System.out.println(n>=18?"Yes,Your are Eligible for Voting\n":"No,Your

are not Eligible for Voting\n");

break;

case 9: System.out.println("Enter amount"); double amt,dis,total; amt=sc.nextDouble(); if(amt<10000){

System.out.println("No discount");

}

else if(amt>=10000 && amt<20000){

dis=amt\*5/100; total=amt-dis;

System.out.println("You got 5% discount");

System.out.println("Discount="+dis);

System.out.println("Total="+total);

}

else if(amt>=20000 && amt<50000){

dis=amt\*7/100; total=amt-dis;

System.out.println("You got 7% discount");

System.out.println("Discount="+dis);

System.out.println("Total="+total);

}

else{

dis=amt\*10/100; total=amt-dis;

System.out.println("You got 10% discount");

System.out.println("Discount="+dis);

System.out.println("Total="+total);

}

case 10:System.out.println("Enter your ATM pin"); n=sc.nextInt();

System.out.println(n==5438?"Valid\n":"Invalid\n"); default:System.out.println("Invalid Choice"); break;

}

}while(ch<=10);

}

}

**O/P:**

1:even/odd

2:divisible by 17

3:divisible by 5 & 7

4:divisible by 5 or 7

5:leap year or not

6:pos/neg

7:Calculate electricity bill

8:age

9:Discount

10:pin

Enter your choice

10

Enter your ATM pin

1234

Invalid

Invalid Choice

1:even/odd

2:divisible by 17

3:divisible by 5 & 7

4:divisible by 5 or 7

5:leap year or not

6:pos/neg

7:Calculate electricity bill

8:age

9:Discount

10:pin

Enter your choice

11

Invalid Choice

**6) 1:first no is between Second no and third no**

**2:min from 3 numbers**

**3:max from 3 numbers**

**4:ATKT**

**5:triangle**

**6:Blood donation**

**7:Aptitude exam**

import java.util.\*; public class Main

{

public static void main(String[] args) { int a,b,c,ch;

Scanner sc=new Scanner(System.in); do{

System.out.println("1:first no is between Second no and third no \n2:min from 3

numbers \n3:max from 3 numbers \n4:ATKT \n5:triangle \n6:Blood donation \n7:Aptitude exam");

System.out.println("Enter your choice"); ch=sc.nextInt(); switch(ch){ case 1:System.out.println("Enter value of a,b & c"); a=sc.nextInt(); b=sc.nextInt(); c=sc.nextInt();

if((a>b && a<c) || (a<b && a>c)){

System.out.println("a is between b and c");

}

else{

System.out.println("a is not between b and c");

}

break;

case 2:System.out.println("Enter value of a,b & c"); a=sc.nextInt(); b=sc.nextInt(); c=sc.nextInt(); if(a<b && a<c){

System.out.println("a is min");

}

else if(b<a && b<c){

System.out.println("b is min");

}

else if(c<a && c<b){

System.out.println("c is min");

}

else if(a==b && a<c){

System.out.println("a & b is equal and min");

}

else if(a==c && a<b){

System.out.println("a & c is equal and min");

}

else if(b==c && b<a){

System.out.println("b & c is equal and min");

}

else{

System.out.println("All are equals");

}

break;

case 3:System.out.println("Enter value of a,b & c");

a=sc.nextInt(); b=sc.nextInt(); c=sc.nextInt(); if(a>b && a>c){

System.out.println("a is max");

}

else if(b>a && b>c){

System.out.println("b is max");

}

else if(c>a && c>b){

System.out.println("c is max");

}

else if(a==b && a>c){

System.out.println("a & b is equal and max");

}

else if(a==c && a>b){

System.out.println("a & c is equal and max");

}

else if(b==c && b>a){

System.out.println("b & c is equal and max");

}

else{

System.out.println("All are equals");

}

break; case 4:System.out.println("Enter 3 subject marks:"); a=sc.nextInt(); b=sc.nextInt(); c=sc.nextInt(); double total=a+b+c; double per=(total/300)\*100; System.out.println("Total marks="+total); if(a>=40||b>=40||c>=40){

if(a>=40 && b>=40 && c>=40){

if(per>=70 && per<=100){

System.out.println("percentage="+per);

System.out.println("Distinction");

}

else if(per>=60 && per<70){

System.out.println("percentage="+per);

System.out.println("First class");

}

else if(per>=55 && per<60){

System.out.println("percentage="+per);

System.out.println("A Second class");

}

else if(per>=50 && per<55){

System.out.println("percentage="+per);

System.out.println("B Second class");

}

else{

System.out.println("percentage="+per);

System.out.println("Pass");

}

}

else{

System.out.println("ATKT Fail");

}

}

else{

System.out.println("Fail");

}

break;

case 5:System.out.println("Enter value a,b & c:");

a=sc.nextInt(); b=sc.nextInt(); c=sc.nextInt();

if((a\*a)+(b\*b)==(c\*c)||(b\*b)+(c\*c)==(a\*a)|| (c\*c)+(a\*a)==(b\*b)){ System.out.println("Right angled triangle");

}

else if((a==b) && (b==c)){

System.out.println("Equilateral triangle");

}

else if((a==b) || (b==c) || (c==a)){

System.out.println("Isosceles triangle");

}

else if((a!=b&&b!=c && c!=a)){

System.out.println("Scalene");

}

else{

System.out.println("Not a triangle");

}

break;

case 6:System.out.println("Enter your age,wt & hb");

int age=sc.nextInt(); int wt=sc.nextInt(); int hb=sc.nextInt();

if(age>=18 && wt>=55 && hb>=12){

System.out.println("Your are Eligible for blood donation\n");

}

else{

System.out.println("Your are not Eligible for blood donation\n");

}

case 7:System.out.println("Enter tenth,twelth & gd percentage");

double tenth=sc.nextDouble(); double twelth=sc.nextDouble(); double gd=sc.nextDouble(); if(tenth>=60 && twelth>=60 && gd>=60){

System.out.println("Eligible for Aptitude exam");

}

else{

System.out.println("Not Eligible for Aptitude exam");

}

default: System.out.println("Invalid Choice");

break;

}

}while(ch<=7);

}

}

**O/P:**

1:first no is between Second no and third no

2:min from 3 numbers

3:max from 3 numbers

4:ATKT

5:triangle

6:Blood donation

7:Aptitude exam

Enter your choice

1

Enter value of a,b & c

12

34 21 a is not between b and c

1:first no is between Second no and third no

2:min from 3 numbers

3:max from 3 numbers

4:ATKT

5:triangle

6:Blood donation

7:Aptitude exam

Enter your choice

9 8

Invalid Choice

**7) 1:Max 2no**

**2:loss or profit**

**3:quadrant**

**4:Bank money(ATM)**

import java.util.\*; public class Main

{

public static void main(String[] args) { int a,b,ch;

Scanner sc=new Scanner(System.in); do{

System.out.println("1:Max from 2 no. \n2:Loss or Profit \n3:quadrant \n4:Bank

Money(ATM)");

System.out.println("Enter your choice"); ch=sc.nextInt(); switch(ch){ case 1:System.out.println("Enter 2 number"); a=sc.nextInt(); b=sc.nextInt(); if(a>b){

System.out.println(a+" is max");

}

else if(b>a){

System.out.println(b+" is max");

}

else{

System.out.println("Both are equal");

}

break;

case 2:double c\_price,s\_price,amt,per;

System.out.println("Enter amount of cost price & selling price"); c\_price=sc.nextDouble(); s\_price=sc.nextDouble(); amt=s\_price-c\_price; if(s\_price>c\_price){

per=(amt/c\_price)\*100;

System.out.println("Profit="+amt+"Percentage="+per+"\n");

}

else if(s\_price<c\_price){

per=(amt/c\_price)\*100;

System.out.println("Loss="+amt+" Percentage="+per+"\n");

}

else{

System.out.println("No Loss/No Profit\n");

}

break;

case 3:int x,y;

System.out.println("Enter value of x & y:"); x=sc.nextInt(); y=sc.nextInt(); if(x>0 && y>0){

System.out.println("I quadrant");

}

else if(x<0 && y>0){

System.out.println("II quadrant");

}

else if(x<0 && y<0){

System.out.println("III quadrant");

}

else if(x>0 && y<0){

System.out.println("IV quadrant");

}

else if(x>0 && y==0){

System.out.println("on +ve x axis");

}

else if(x<0 && y==0){

System.out.println("on -ve x axis");

}

else if(x==0 && y>0){

System.out.println("on +ve y axis");

}

else if(x==0 && y<0){

System.out.println("lies on -ve y axis");

}

else{

System.out.println("lies on origin");

}

break;

case 4:System.out.println("Enter balance amount & Withdrawal amount");

int b\_amt=sc.nextInt(); int w\_amt=sc.nextInt(); if(w\_amt>b\_amt){

System.out.println("Insufficient balance");

}

else{

int r\_bal=b\_amt-w\_amt;

System.out.println("Remaining balance="+r\_bal);

}

break; default:System.out.println("Invalid choice");

break;

}

}while(ch<=4);

}

}

**O/P:**

1:Max from 2 no.

2:Loss or Profit

3:quadrant

4:Bank Money(ATM)

Enter your choice

3

Enter value of x & y:

12

1

I quadrant

1:Max from 2 no.

2:Loss or Profit

3:quadrant

4:Bank Money(ATM)

Enter your choice

4

Enter balance amount & Withdrawal amount

1200

1000 Remaining balance=200 1:Max from 2 no.

2:Loss or Profit

3:quadrant

4:Bank Money(ATM)

Enter your choice

5

Invalid choice

**8)**

import java.util.\*;

public class Main {

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.println("Enter a date ( DD MM YYYY):");

int day = sc.nextInt();

int month = sc.nextInt();

int year = sc.nextInt();

switch (month)

{

case 1: case 3: case 5: case 7: case 8: case 10: case 12:

int day\_of\_month=31;

if(year>=1900){

if (day <= 31)

{

System.out.println("Valid ");

} else {

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

}

}

else{

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

}

break;

case 4: case 6: case 9: case 11:

if(year>=1900){

if ( day <= 30)

{

System.out.println("Valid ");

} else {

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

}

}

else

{

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

}

break;

case 2:

if(year>=1900){

if (year % 4==0)

{

if (day <= 29) {

System.out.println("Valid ");

} else {

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

}

} else {

if ( day <= 28) {

System.out.println("Valid ");

} else {

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

}

}

}

else

{

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

}

break;

default:

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

break;

}

}

}

**o/p:**

Enter a date ( DD MM YYYY):

12 12 20233

Valid

**9) Write a program to check whether the given input is digit or lowercase character or uppercase character or a special character using Switch case?**

Import java.util.\*;

public class Main

{

public static void main(String args[])

{

char ch;

System.out.println("Enter a character:");

Scanner sc = new Scanner(System.in);

ch = sc.next().charAt(0);

if(ch >= 'A' && ch <= 'Z')

{

ch = 1;

}

else

if(ch >= 'a' && ch <= 'z')

{

ch = 2;

}

else

if(ch >= '0' && ch <= '9')

{

ch = 3;

}

switch(ch)

{

case 1:

System.out.println("Upper case \n");

break;

case 2:

System.out.println("lower case \n");

break;

case 3:

System.out.println("Digit \n");

break;

default:

System.out.println("Special character\n");

}

}

}

**o/p:**

Enter a character:

3

Digit

**10) Write a program to read a vowel character and print any appropriate word by using “Switch case”?**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter Single Character:");

char ch=sc.next().charAt(0);

switch (ch) {

case 'a':

case 'e':

case 'i':

case 'o':

case 'u':

System.out.println(ch + " is vowel");

break;

default:

System.out.println(ch + " is not vowel");

}

}

}

**o/p:**

Enter Single Character:

A a

a is vowel

**11) Write a program to find the biggest number among 2 numbers by using switch case?**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.printf("Enter the Number 1 : ");

int n1 = input.nextInt();

System.out.printf("Enter the Number 2 : ");

int n2 = input.nextInt();

int res = n1>n2?1:0;

switch (res)

{

case 0:

res = n1==n2?1:0;

switch(res)

{

case 0:

System.out.printf("Maximum Number is "+n2);

break;

case 1:

System.out.printf("Both are Equals");

break;

}

break;

case 1:

System.out.printf("Maximum Number is "+n1);

break;

}

}

}

**o/p:**

Enter the Number 1 : 45

Enter the Number 2 : 35

Maximum Number is 45

**12) Write a program to emulated a four function calculator which can perform addition, subtraction multiplication and Division. Program should read two real numbers and an operator which tells the operation to the performed. Do it by using Case?**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int choice;

System.out.println("Enter the Number 1 : ");

int n1 = sc.nextInt();

System.out.println("Enter the Number 2 : ");

int n2 = sc.nextInt();

do {

System.out.println(" 1.Addtion:\n 2.subtraction\n 3.multiplication\n 4.Division \n 5.Exit");

choice = sc.nextInt();

int n3 = n1 + n2;

int n4 = n1 - n2;

int n5 = n1 \* n2;

double n6 = n1 % n2;

switch (choice) {

case 1:

System.out.println("Addtion:" + n3);

break;

case 2:

System.out.println("subtraction:" + n4);

break;

case 3:

System.out.println("multiplication:" + n5);

break;

case 4:

System.out.println("Division:" + n6);

break;

case 5:

System.exit(0);

default:

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

}

} while (choice <= 5);

}

}

**o/p:**

Enter the Number 1 :

345

Enter the Number 2 :

543

1.Addtion:

2.subtraction

3.multiplication

4.Division

5.Exit

3

multiplication:187335

1.Addtion:

2.subtraction

3.multiplication

4.Division

5.Exit

2

subtraction:-198

1.Addtion:

2.subtraction

3.multiplication

4.Division

5.Exit

**13) Write a program to read a number and print how many number of 500, 100, 20, 10, 5, 2, 1 notes are available in the given Amount by using case?**

import java.util.\*;

public class Main

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int tempAmt;

int r500=0, r100=0, r20=0, r10=0, r5=0, r2=0, r1=0;

System.out.println("Enter Your Amount:");

int amt=sc.nextInt();

tempAmt = amt;

switch (1) {

case 1:

if (tempAmt >= 500) {

r500 = tempAmt / 500;

tempAmt = tempAmt % 500;

}

case 2:

if (tempAmt >= 100) {

r100 = tempAmt / 100;

tempAmt = tempAmt % 100;

}

case 3:

if (tempAmt >= 20) {

r20 = tempAmt / 20;

tempAmt = tempAmt % 20;

}

case 4:

if (tempAmt >= 10) {

r10 = tempAmt / 10;

tempAmt = tempAmt % 10;

}

case 5:

if (tempAmt >= 5) {

r5 = tempAmt / 5;

tempAmt = tempAmt % 5;

}

case 6:

if (tempAmt >= 2) {

r2 = tempAmt / 2;

tempAmt = tempAmt % 2;

}

case 7:

if (tempAmt >= 1) {

r1 = tempAmt / 1;

tempAmt = tempAmt % 1;

}

}

System.out.println("Number of 500 notes:"+r500);

System.out.println("Number of 100 notes:"+r100);

System.out.println("Number of 20 notes:"+r20);

System.out.println("Number of 10 notes:"+r10);

System.out.println("Number of 5 notes:"+r5);

System.out.println("Number of 2 notes:"+r2);

System.out.println("Number of 1 notes:"+r1);

}

}

**o/p:**

Enter Your Amount:

654321

Number of 500 notes:1308

Number of 100 notes:3

Number of 20 notes:1

Number of 10 notes:0

Number of 5 notes:0

Number of 2 notes:0

Number of 1 notes:1

**14)**

import java.util.\*;

public class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter day: ");

int day = sc.nextInt();

System.out.print("Enter month: ");

int month = sc.nextInt();

System.out.print("Enter year: ");

int year = sc.nextInt();

if(year>=1000&&year<=9999){

if(month>=1&&month<=12){

if(day>=1&&day<=31){

switch (month) {

case 4: case 6: case 9: case 11:

if (day <= 30) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==30){

day=1;

month++;

}

else{

day++;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

System.out.println("Next date="+day+"-"+month+"-"+year+" valid date");

break;

case 2:

if (year % 4 == 0) {

if (day <= 29) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==29){

day=1;

month++;

}

else{

day++;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

}

else if(day<=28){

System.out.println(day+"-"+month+"-"+year+"valid date");

if(day==28){

day=1;

month++;

}

else{

day++;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

System.out.println("Next date="+day+"-"+month+"-"+year+" valid date");

break;

default:

if (day <= 31) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==31 && month==12){

day=1;

month=1;

year++;

}

else if(day==31){

day=1;

month++;

}

else{

day++;

}

}

System.out.println("Next date="+day+"-"+month+"-"+year+" valid date");

break;

}

}

else{

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

}

}

else{

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

}

}

else{

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

}

}

}

**O/P:**

Enter day: 31

Enter month: 12

Enter year: 2024

31-12-2024 valid date

Next date=1-1-2025 valid date

**15)**

import java.util.\*;

public class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter day: ");

int day = sc.nextInt();

System.out.print("Enter month: ");

int month = sc.nextInt();

System.out.print("Enter year: ");

int year = sc.nextInt();

if(year>=1000&&year<=9999){

if(month>=1&&month<=12){

if(day>=1&&day<=31){

switch (month) {

case 4: case 6: case 9: case 11:

if (day <= 30) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==30){

day=-1;

month--;

}

else{

day--;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

System.out.println("Pre date="+day+"-"+month+"-"+year+" valid date");

break;

case 2:

if (year % 4 == 0) {

if (day <= 29) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==29){

day=-1;

month--;

}

else{

day--;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

}

else if(day<=28){

System.out.println(day+"-"+month+"-"+year+"valid date");

if(day==28){

day=1;

month++;

}

else{

day++;

}

}

else{

System.out.println(day+"-"+month+"-"+year+" Invalid date");

}

System.out.println("Pre date="+day+"-"+month+"-"+year+" valid date");

break;

default:

if (day <= 31) {

System.out.println(day+"-"+month+"-"+year+" valid date");

if(day==31 && month==12){

day=-1;

month=-1;

year--;

}

else if(day==31){

day=-1;

month--;

}

else{

day--;

}

}

System.out.println("Pre date="+day+"-"+month+"-"+year+" valid date");

break;

}

}

else{

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

}

}

else{

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

}

}

else{

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

}

}

}

**o/p:**

Enter day: 23

Enter month: 12

Enter year: 2024

23-12-2024 valid date

Pre date=22-12-2024 valid date