PROGRAMMING FUNDAMENTALS WEEK – 04 ASSIGNMENT

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Question 01

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter First Number : ");
		int num1 = input.nextInt();

		System.out.print("Enter Second Number : ");
		int num2 = input.nextInt();

		int result = 0;
		if(num1>num2){
			result = num1+num2;
			System.out.println(num1+" is Greater Than "+num2+". So addition of two numbers is "+result+".");
		}else{
			System.out.println(num1+" is Less Than "+num2+".");
		}
	}
}
```

Question 02

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter Negative or Positive Integer : ");
		int number = input.nextInt();

		if(number<0){
			System.out.println(" You Entered "+number+". absolute number of "+number+" is +"+-number+".");
		}else{
			System.out.println(" You Entered "+number+". absolute number of "+number+" is +"+number+".");
		}
	}
}
```

Question 03

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter Chemistry Marks : ");
		double chemistry = input.nextDouble();
		System.out.print(" Enter Physics Marks : ");
		double physics = input.nextDouble();
		System.out.print(" Enter Combined MathsMarks : ");
		double maths = input.nextDouble();

		//Avarage calculation
		double result = (chemistry + physics + maths)/3 ;

		if(result>=75.00){
			System.out.println(" Pass");
		}else{
			System.out.println(" Fail");
		}
	}
}
```

Question 04

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Unit Price : ");
		double unitPrice = input.nextDouble();
		System.out.print(" Amount Brought : ");
		double amount = input.nextDouble();

		//Total calculation
		double total = unitPrice*amount ;

		if(total>1500){
			System.out.println(" You are entitled to the super draw.");
		}else{
			System.out.println(" Try again");
		}
	}
}
```

Question 05

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Unit Price : ");
		double unitPrice = input.nextDouble();
		System.out.print(" Amount Brought : ");
		double amount = input.nextDouble();

		//Total calculation
		double total = unitPrice*amount ;

		if(total>500.00){
			double discount = total*5/100;
			total = total - discount;
			System.out.println(" Your Discount is "+discount+" & your Final Amount is "+total+".");
		}else{
			System.out.println(" No discount given");
		}
	}
}
```

Question 06

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter the Year: ");
		int year = input.nextInt();

		//Leap year check
		if(year % 4 == 0){
			if(year % 100 == 0){
				if(year % 400 == 0){
					System.out.println(" "+year+" is leap year");
				}else{
					System.out.println(" "+year+" is not a leap year");
				}
			}else{
				System.out.println(" "+year+" is leap year");
			}
		}else{
			System.out.println(" "+year+" is not a leap year");
		}
	}
}
```

Question 06 (Method 02)

```
import java.util.Scanner;


class LeapYearChecker {
        public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter the year: ");
        int year = input.nextInt();


    // Leap year check
    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {
       System.out.println(year + " is a leap year.");
    } else {
       System.out.println(year + " is not a leap year.");
    }
  }
}
```

Question 07

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" First number A : ");
		int a = input.nextInt();
		System.out.print(" Second number B : ");
		int b = input.nextInt();
		System.out.print(" Third number C : ");
		int c = input.nextInt();


		if(a>b & a>c){
			System.out.println(" Maximum number is A = "+a);
		}else if(b>a & b>c ){
			System.out.println(" Maximum number is B = "+b);
		}else{
			System.out.println(" Maximum number is C = "+c);
		}
	}
}
```

Question 08

C. if(x==10){}

E. if((x=100)!=10){}

F. if((x=100)>0==true){}

Question 09

A. if(b){}

B. if(b=false){}

C. if(b==false){}

D. if(b=false==false){}

E. if((b=false)==false){}

F. if(b=(false==true)){}

Question 10

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter Integer Number : ");
		int number = input.nextInt();


		if(number%2==0){
			System.out.println(" "+number+" is even number");
		}else{
			System.out.println(" "+number+" is odd number");
		}
	}
}
```

Question 11

A. true

B. true

C. true

D. false

E. true

F. false

G. true

Question 12

A. 9

B. true

C. error: incompatible types: boolean cannot be converted to int

D. false

E. true

Question 13

Line 01 - 10

Line 02 - true

Line 03 - error: incompatible types: boolean cannot be converted to int

Line 04 - true

Line 05 - true

Line 06 – false

Question 14

Line 01 - 2351.521.231ctrue

Line 02 - 101001251.521.231ctrue

Line 03 - 356.731true

Line 04 - error: bad operand types for binary operator '+'

Line 05 - error: bad operand types for binary operator '+'

Question 15

Line 01 - true

Line 02 - false

Line 03 - true

Line 04 - false

Line 05 - true

Line 06 - false

Line 07 – false

Question 16

A. 1 2 3

B. 2 3

C. 3

D. 4 1 2 3

E. 4 1 2 3

F. 4 1 2 3

Question 17

D. Prints 0 0

Question 18

A , B, C, D, E, F, H

Line 7,9,10 out of scope of the variable

Question 19

A. 1

B. 2 3 1

C. 3 1

D. Wrong

E. Wrong

F. Wrong

Question 20

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter Integer Number : ");
		int number = input.nextInt();


		if(number<0){
			System.out.println(" "+number+" is negative number");
		}else if(number==0){
			System.out.println(" You Entered "+number);
		}else{
			System.out.println(" "+number+" is positive number");
		}
	}
}
```

Question 21

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter first number : ");
		double number1 = input.nextDouble();
		System.out.print(" Enter second number : ");
		double number2 = input.nextDouble();

		//calculation
		double difference = number1-number2;

		if(difference<0){
			difference*=-1;
		}
		System.out.println(" Absolute difference between two numbers is "+diffrance);
	}
}
```

Question 22

Can insert

A. 65

B. 65

C. wrong

D. 65

E. 66

Can’t insert

F. incompatible types: boolean cannot be converted to int

G. incompatible types: char cannot be converted to String

H. incompatible types: possible lossy conversion from double to int

Question 23

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter first number : ");
		double number1 = input.nextDouble();
		System.out.print(" Enter second number : ");
		double number2 = input.nextDouble();



		if(number1<number2){
			System.out.println(" The first number is less than the second number");
		}else if(number1>number2){
			System.out.println(" The first number is greater than the second number");
		}else if(number1==number2){
			System.out.println(" Both are equal");
		}
	}
}
```

Question 24

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter first Integer number : ");
		int number1 = input.nextInt();
		System.out.print(" Enter second Integer number : ");
		int number2 = input.nextInt();
		System.out.print(" Enter thrid Integer number : ");
		int number3 = input.nextInt();

		//rightmost digit of 3 numbers
		int num1 = number1%10;
		int num2 = number2%10;
		int num3 = number3%10;

		boolean result = false;
		if(num1==num2 || num1==num3|| num2==num3){
			result = true;
		}
		System.out.println(result);
	}
}
```

Question 25

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter first Integer number : ");
		int num1 = input.nextInt();
		System.out.print(" Enter second Integer number : ");
		int num2 = input.nextInt();
		System.out.print(" Enter thrid Integer number : ");
		int num3 = input.nextInt();


		boolean result = false;
		if (num1 > (num2 - num3) || num2 > (num1 - num3) || num3 > (num1 - num2)) {
		result = true;
		 }
		 System.out.println(result);
	}
}
```

Question 26

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter selling price : ");
		double sell = input.nextDouble();
		System.out.print(" Enter cost of product : ");
		double cost = input.nextDouble();


		if((sell-cost)>0){
			System.out.println(" Profit");
		}else if((cost-sell)>0){
			System.out.println(" Loss");
		}else if(cost==sell){
			System.out.println(" No Profit No Loss");
		}
	}
}
```

Question 27

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter number one: ");
		int num1 = input.nextInt();
		System.out.print(" Enter number two: ");
		int num2 = input.nextInt();
		System.out.print(" Enter number three: ");
		int num3 = input.nextInt();

		if((num1<num2 && num2<num3)){
			System.out.println(" Increasing");
		}else if((num1>num2 && num2>num3)){
			System.out.println(" Decreasing");
		}else{
			System.out.println(" Neither increasing nor decreasing order");
		}
	}
}
```

Question 28

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter person age: ");
		int age = input.nextInt();
		System.out.print(" Enter number weight in kg: ");
		int weight = input.nextInt();

		if( age>=18 && weight>=50){
			System.out.println(" You are eligible to donate blood");
		}else{
			System.out.println(" You are not eligible to donate blood");
		}
	}
}
```

Question 29

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter number one: ");
		int num1 = input.nextInt();
		System.out.print("Enter number two: ");
		int num2 = input.nextInt();

		boolean result = false;
		if((num1>0 && num2>0)||(num1<0 && num2<0)){
			result = true;
		}
		System.out.println(result);
	}
}
```

Question 30

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter character: ");

		//capture letter as a String
		String inputString = input.nextLine();
		 //capture letter from String
		char letter = inputString.charAt(0);
		//casting to integer
		int conLetter = (int)letter;

		if(conLetter >=65 && conLetter <=90){
			System.out.println("you Entered uppercase Letter");
		}else if(conLetter >=97 && conLetter <=122){
			System.out.println("you Entered lowercase Letter");
		}else{
			System.out.println("Please Enter English Letter");
		}
	}
}
```

Question 31

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Number: ");
		int num1 = input.nextInt();

		//get rightmost digit
		int digit = num1%10;
		if(num1%7==0 || digit==7){
			System.out.println("you Entered Buzz Number");
		}else{
			System.out.println("you did not Entered Buzz Number");
		}
	}
}
```

Question 32

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter number of classes: ");
		int classes = input.nextInt();
		System.out.print("Enter classes attended: ");
		int attendance = input.nextInt();

    //calculate presentage
    double present = attendance*100/classes;

		if(present<70){
			System.out.print("have you got medical cause? (yes for 'Y' and no for 'N'): ");
			String answer = input.next();
			if(answer.equals("Y")){
				System.out.println("You can sit for Exam");
			}else if(answer.equals("N")){
				System.out.println("You can not sit for Exam");
			}
		}else if(present>=70){
			System.out.println("You can sit for Exam");
		}
	}
}
```

Question 33

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Your Salary: ");
		int salary= input.nextInt();
		System.out.print("Enter Years of Service: ");
		int years = input.nextInt();


		//calculate presentage
		 if(years<5){
			salary *= 1.1;
		}else if(years>=5 && years<10){
			salary *=1.15;
		}else if(years>=10){
			salary *=1.25;
		}
		System.out.println("Total salary with bonus is "+salary);
	}
}
```

Question 34

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter number of Books: ");
		int bookQty= input.nextInt();

		 //calculate total
		double total = bookQty*100;

		 double discount=0;
		 if(total>=5000){
			discount = total*0.1;
		}

		System.out.println("SubTotal  : "+total);
		System.out.println("Discount  : "+discount);
		System.out.println("Discount  : "+(total-discount));
	}
}
```

Question 35

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter your Temperature: ");
		double temp= input.nextDouble();


		System.out.println(temp>=80 ? "Swimming":temp>=60 && temp<80?"Tennis":temp>=40 &&
temp<60?"Golf":"Skiing");
	}
}
import java.util.*;
```

Question 36

```
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter the English Letter: ");

		//capture letter as a String
		String inputLetter = input.nextLine();
		//Capture letter from String
		char letter = inputLetter.charAt(0);
		//casting to integer
		int conLetter = (int)letter;
		//Check user entered English Letter
		 if(conLetter <65 || conLetter >122){
			System.out.println(" you did not enter English Letter");
		}


	if(conLetter==97||conLetter==101||conLetter==105||conLetter==111||conLetter==117||conLetter==65||conLetter
==69||conLetter==73||conLetter==79||conLetter==85){
			System.out.println(" you Entered vowel");
		}else{
			System.out.println(" you Entered consonant");
		}
	}
}
```

Question 37

```
import java.util.*;

class Example {

	public static void main(String args[]) {

		Scanner input = new Scanner(System.in);

		System.out.print(" Enter current annual salary: ");

		double salary = input.nextDouble();

		System.out.print(" Enter Performance rating (1=excellent, 2=good, and 3=poor).: ");

		int rating = input.nextInt();


		switch(rating){

			case 1 :System.out.printf(" your perfomance raise is : %1.2f and your new salary is
			%1.2f",salary*6/100,salary*1.06);break;

			case 2 :System.out.printf(" your perfomance raise is : %1.2f and your new salary is
			%1.2f",salary*4/100,salary*1.04);break;

			case 3 :System.out.printf(" your perfomance raise is : %1.2f and your new salary is
			%1.2f",salary*1.5/100,salary*1.015);break;

		}

	}

}
```

Question 38

```
import java.util.*;

class Example {

	public static void main(String args[]) {

		Scanner input = new Scanner(System.in);

		System.out.print(" Enter attendance presentage %: ");

		double attendance = input.nextDouble();

				System.out.print(" Enter avarage Marks %: ");

		double marks = input.nextDouble();


		System.out.print(attendance>=80 && marks>=50?" You are eligible to sit O/L exam":" You are not eligible to
sit O/L exam");

	}

}
```

Question 39

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter time in 00:00 24h format: ");
		String time = input.nextLine();


		// Extract the hour from the input string
		int hour = Integer.parseInt(time.split(":")[0]);


		System.out.println(hour>=0 && hour<12?" Good morning":hour>=12&&hour<16?" Good
afternoon":hour>=16&&hour<19?"Good evening":hour>=19&&hour<=24?"Good night":" Enter Correct Time");
	}
}
```

Question 40

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter Year: ");
		int year = input.nextInt();
		boolean leapOrNot = (year%4==0 && year%100!=0) || (year%400==0)?true:false;
		System.out.print(" Enter month (1-12): ");
		int month = input.nextInt();


		switch(month){
			case 1 : System.out.print(" 31 Days");break;
			case 2 : System.out.print(leapOrNot?" 29 Days":" 28 Days");break;
			case 3 : System.out.print(" 31 Days");break;
			case 4 : System.out.print(" 30 Days");break;
			case 5 : System.out.print(" 31 Days");break;
			case 6 : System.out.print(" 30 Days");break;
			case 7 : System.out.print(" 31 Days");break;
			case 8 : System.out.print(" 31 Days");break;
			case 9 : System.out.print(" 30 Days");break;
			case 10 : System.out.print(" 31 Days");break;
			case 11 : System.out.print(" 30 Days");break;
			case 12 : System.out.print(" 31 Days");break;
		}
	}
}
```

Question 41

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter number of copies: ");
		int copies = input.nextInt();


		if(copies>0 && copies<100){
			System.out.println(" Rs.30.00 per copy & your total amount is "+copies*30);
		}else if(copies>=100 && copies<500){
			System.out.println(" Rs.28.00 per copy & your total amount is "+copies*28);
		}else if(copies>=500 && copies<800){
			System.out.println(" Rs.27.00 per copy & your total amount is "+copies*27);
		}else if(copies>=800 && copies<=1000){
			System.out.println(" Rs.26.00 per copy & your total amount is "+copies*26);
		}else{
			System.out.println(" Rs.25.00 per copy & your total amount is "+copies*25);
		}
	}
}
```

Question 42

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print(" Enter waist size : ");
		int size = input.nextInt();
		if(size<28 || size>42){
			System.out.println(" Enter Correct size ");
		}


		if(size>=28 && size<30){
			System.out.println(" X-small");
		}else if(size>=30 && size<32){
			System.out.println(" Small");
		}else if(size>=32 && size<35){
			System.out.println(" Medium");
		}else if(size>=36 && size<39){
			System.out.println(" Large");
		}else if(size>=40 && size<43){
			System.out.println(" X-Large");
		}
	}
}
```

Question 43

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter First number	: ");
		int num1 = input.nextInt();
		System.out.print("Enter Second number	: ");
		int num2 = input.nextInt();
		System.out.print("Enter Operator (+,-,*,/,%,^): ");
		char sign = input.next().charAt(0);


		switch(sign){
			case '+':System.out.println(num1+" "+sign+" "+num2+" = "+(num1+num2));break;
			case '-':System.out.println(num1+" "+sign+" "+num2+" = "+(num1-num2));break;
			case '*':System.out.println(num1+" "+sign+" "+num2+" = "+(num1*num2));break;
			case '/':System.out.println(num1+" "+sign+" "+num2+" = "+(num1/num2));break;
			case '%':System.out.println(num1+" "+sign+" "+num2+" = "+(num1%num2));break;
			case '^':System.out.println(num1+" "+sign+" "+num2+" = "+Math.pow(num1,num2));break;
		}
	}
}
```

Question 44

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter day from 2022 February: ");
		int day = input.nextInt();
		switch(day){
			case 6:
			case 13:
			case 20:
			case 27:System.out.println("Sunday");break;
			case 7:
			case 14:
			case 21:
			case 28:System.out.println("Monday");break;
			case 1:
			case 8:
			case 15:
			case 22:System.out.println("Tuesday");break;
			case 2:
			case 9:
			case 16:
			case 23:System.out.println("Wednesday");break;
			case 3:
			case 10:
			case 17:
			case 24:System.out.println("Thursday");break;
			case 4:
			case 11:
			case 18:
			case 25:System.out.println("Friday");break;
			case 5:
			case 12:
			case 19:
			case 26:System.out.println("Saturday");break;

		}
	}
}
```

Question 45

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Raw Number (1-8): ");
		int raw = input.nextInt();
		System.out.print("Enter Column Number (1-8): ");
		int col = input.nextInt();

		if((raw%2==0&&col%2==0)||(raw%2!=0&&col%2!=0)){
			System.out.print("White");
		}else{
			System.out.print("Black");
		}
	}
}
```

Question 46

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter length a: ");
		int a = input.nextInt();
		System.out.print("Enter length b: ");
		int b = input.nextInt();
		System.out.print("Enter length c: ");
		int c = input.nextInt();

		System.out.println((a*a)+(b*b)==(c*c)?"Pythagorean triple":"not in Pythagorean triple");
	}
}
```

Question 47

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Month (1-12): ");
		int month = input.nextInt();
		System.out.print("Enter day (1-30): ");
		int day = input.nextInt();

		if((month==12 && day>=21 || month <=3 && day<=19)){
			System.out.println("Winter");
		}else if((month>=3 && day>=20 || month <=6 && day<=20)){
			System.out.println("Spring");
		}else if((month>=6 && day>=21 || month <=9 && day<=21)){
			System.out.println("Summer");
		}else if((month>=9 && day>=22 || month <=12 && day<=20)){
			System.out.println("Autumn");
		}
	}
}
```

Question 48

```
import java.util.*;
class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Birth Month (1-12): ");
		int month = input.nextInt();
		System.out.print("Enter Birth day (1-30): ");
		int day = input.nextInt();

		if((month==12&&day>=22)||(month==1&&day<=19)){
			System.out.println("Capricornus");
		}else if((month==1&&day>=20)||(month==2&&day<=18)){
			System.out.println("Aquarius");
		}else if((month==2&&day>=19)||(month==3&&day<=20)){
			System.out.println("Pisces");
		}else if((month==3&&day>=21)||(month==4&&day<=19)){
			System.out.println("Aries (Ram)");
		}else if((month==4&&day>=20)||(month==5&&day<=20)){
			System.out.println("Taurus");
		}else if((month==5&&day>=21)||(month==6&&day<=21)){
			System.out.println("Gemini");
		}else if((month==6&&day>=22)||(month==7&&day<=22)){
			System.out.println("Cancer");
		}else if((month==7&&day>=23)||(month==8&&day<=22)){
			System.out.println("Leo");
		}else if((month==8&&day>=23)||(month==9&&day<=22)){
			System.out.println("Virgo");
		}else if((month==9&&day>=23)||(month==10&&day<=23)){
			System.out.println("Libra");
		}else if((month==10&&day>=24)||(month==11&&day<=21)){
			System.out.println("Scorpius");
		}else if((month==11&&day>=22)||(month==12&&day<=21)){
			System.out.println("Sagittarius");

	}
}
```

Question 49

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Basic Salary: ");
		double salary = input.nextDouble();


		double ha = 0;
		double ta = 0;
		if(salary<=10000){
			ha=salary*0.2;
			ta=salary*0.6;
		}else if(salary<=20000){
			ha=salary*0.25;
			ta=salary*0.7;
		}else if(salary>20000){
			ha=salary*0.3;
			ta=salary*0.75;
		}
		System.out.println("Gross Salary :"+(salary+ha+ta));
	}
}
```

Question 50

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter angle a: ");
		int a = input.nextInt();
		System.out.print("Enter angle a: ");
		int b = input.nextInt();
		System.out.print("Enter angle a: ");
		int c = input.nextInt();

		//Check angles more than 0
		if(a==0||b==0||c==0){
			System.out.println("triangle can not be formed");
		}else if((a+b+c)==180){
			System.out.println("triangle can be formed");
		}else{
			System.out.println("triangle can not be formed");
		}
	}
}
```

Question 51

```
import java.util.*;

class Example {

	public static void main(String args[]) {

		Scanner input = new Scanner(System.in);

		System.out.print("Enter your age: ");

		int age = input.nextInt();



	System.out.println(age>65?"Senior":age>20&&age<=65?"Adult":age>13&&age<=20?"Teenager":age>1&&age<=13?
"child":"Infant");

	}

}
```

Question 52

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter X coordinate: ");
		int x = input.nextInt();
		System.out.print("Enter Y coordinate: ");
		int y = input.nextInt();


		String origin = "";
		if(x>0&&y>0){
			origin = "Quadrant I";
		}else if(x<0&&y>0){
			origin = "Quadrant II";
		}else if(x<0&&y<0){
			origin = "Quadrant III";
		}else if(x>0&&y<0){
			origin = "Quadrant IV";
		}
		System.out.println("point lies in "+origin);
	}
}
```

Question 53

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter systolic blood pressure: ");
		int systolic = input.nextInt();
		System.out.print("Enter diastolic blood pressure: ");
		int diastolic = input.nextInt();

		String blodPre = "-";
		if(systolic>=130&&diastolic>=90){
			blodPre = "High Pressure";
		}else if(systolic<=100&&diastolic<=70){
			blodPre = "Low Pressure";
		}else if(systolic>100&&systolic>130&&diastolic>70&&diastolic<90){
			blodPre = "Normal";
		}
		System.out.println("Your Blood Pressure is "+blodPre);
	}
}
```

Question 54

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Extention: ");
		String url = input.next();


		if(url.equals(".com")){
			System.out.println("commercial website");
		}else if(url.equals(".org")){
			System.out.println("organization website");
		}else if(url.equals(".lk")){
			System.out.println("Sri Lankan website");
		}
	}
}
```

Question 55

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter lower limit : ");
		int lower = input.nextInt();
		System.out.print("Enter higher limit : ");
		int higher = input.nextInt();
		System.out.print("Enter your number : ");
		int number = input.nextInt();
		if(lower>higher){
			System.out.println("your number range is wrong");
		}else if(number>higher){
			System.out.println("your number is upper bound in the given range ");
		}else if(number<lower){
			System.out.println("your number is lower bound in the given range ");
		}else if(number>=lower && number<=higher){
			System.out.println("your number is in the range ");
		}
	}
}
```

Question 56

```
item = ((a>=10)&&(b<50));
```

Question 57

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.println("Enter First Date");
		System.out.println("\n");
		System.out.print("Enter year : ");
		int year1 = input.nextInt();
		System.out.print("Enter month : ");
		int month1 = input.nextInt();
		System.out.print("Enter day : ");
		int day1 = input.nextInt();

		System.out.println("\n\n");
		System.out.println("Second Date");
		System.out.println("\n");
		System.out.print("Enter year : ");
		int year2 = input.nextInt();
		System.out.print("Enter month : ");
		int month2 = input.nextInt();
		System.out.print("Enter day : ");
		int day2 = input.nextInt();
		System.out.println("\n\n");

		if(year1>year2){
			System.out.print("Second Date came first");
		}else if(year1<year2){
			System.out.print("First Date came first");
		}else if(year1==year2 && month1>month2){
			System.out.print("Second Date came first");
		}else if(year1==year2 && month1<month2){
			System.out.print("First Date came first");
		}else if(year1==year2 && month1==month2 && day1>day2){
			System.out.print("Second Date came first");
		}else if(year1==year2 && month1==month2 && day1<day2){
			System.out.print("First Date came first");
		}
	}
}
```

Question 58

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter year : ");
		int year = input.nextInt();
		System.out.print("Enter month : ");
		int month = input.nextInt();
		System.out.print("Enter day : ");
		int day = input.nextInt();

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

		int year0 = year-(14-month)/12;
		int x = year0+(year0/4)-(year0/100)+(year0/400);
		int month0 = month+12*((14-month)/12)-2;
		int day0 = (day+x+(31*month0)/12)%7;

		String date = " ";
		switch(day0){
		case 0 : date ="Sunday";break;
		case 1 : date ="Monday";break;
		case 2 : date ="Tuesday";break;
		case 3 : date ="Wednesday";break;
		case 4 : date ="Thursday";break;
		case 5 : date ="Friday";break;
		case 6 : date ="Saturday";break;
		}
		System.out.println("Day of the Week : "+date);
	}
}
```

Question 59

```
import java.util.*;


class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("R Value : ");
		int r = input.nextInt();
		System.out.print("G Value : ");
		int g = input.nextInt();
		System.out.print("B Value : ");
		int b = input.nextInt();

		double c,m,y,k;
		if(r==0 && g==0 && b==0){
			c=0;
			m=0;
			y=0;
			k=1;
		}else{

		double w =  Math.max(r / 255.0, Math.max(g / 255.0, b / 255.0));

		c = (w-(r/255))/w;
		m = (w-(g/255))/w;
		y = (w-(b/255))/w;
		k = 1-w;
		}

		System.out.printf("CMYK Value is : %1.2f %1.2f %1.2f %1.2f",c,m,y,k);
	}
}
```

Question 60

```
import java.util.*;

class Example {
	public static void main(String args[]) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter Parcel Weight : ");
		double weight = input.nextDouble();


		double fee = 0;
		if(weight<=5){
			fee = 500;
		}else if(weight>5){
			double addWeight = weight - 5;
			fee = 500 + addWeight*100;
		}
		System.out.printf("courier charge is : %1.2f",fee);
	}
}
```