# 11. PROBLEM:

Write a program to show that during function overloading, if no matching argument is found, then java will apply automatic type conversions(from lower to higher data type).

# SOURCECODE:

class fraction

{

public double result1;

public double result2;

void sum(int z,int y)

{

result1=z+y;

System.out.println("The sum1 is: "+result1);

}

void sum(float x,float q)

{

result2=x+q;

System.out.println("The sum2 is: "+result2);

}

}

public class Assignment11

{

public static void main(String args[])

{

fraction f1=new fraction();

f1.sum(10,20);

f1.sum(5.6f,6.5f);

f1.sum('a','b');

}

}

# OUTPUT:

The sum1 is: 30.0

The sum2 is: 12.100000381469727

The sum1 is: 195.0

# DISCUSSION:

1.Here we create class fraction and create two variables of higher data type double result1 and double result2.

2.In method overloading we first take sum method by passing integer type(lower data type) as an arguement and secondly we take float type variable(lower data type) as arguement.

3. no matching argument is found, then java apply automatic type conversions(from lower to higher data type) as shown in the program above.