1. You are required to go through RAD Environment & try to understand its utility then write down following:

a. Shortcut commands(As many as possible)

b. What are views?

c. What are Perspective?

Ans:**A.**

Shortcut	Desc
Ctrl+shift+r	choose resource
Ctrl+o	List all methods in a class in java file
Ctrl+F4	Close active file in RAD editor
Ctrl+Shift+f4	Close all open windows editor
Ctrl+f	Helps to find
Ctrl+k	Helps to finds next searched phrase
Ctrl+shift+k	Find previous searched phrase
Ctrl+l	Help top go to particular line no.
Ctrl+shift+s	Save all
Ctrl+shift+o	Organize all imports

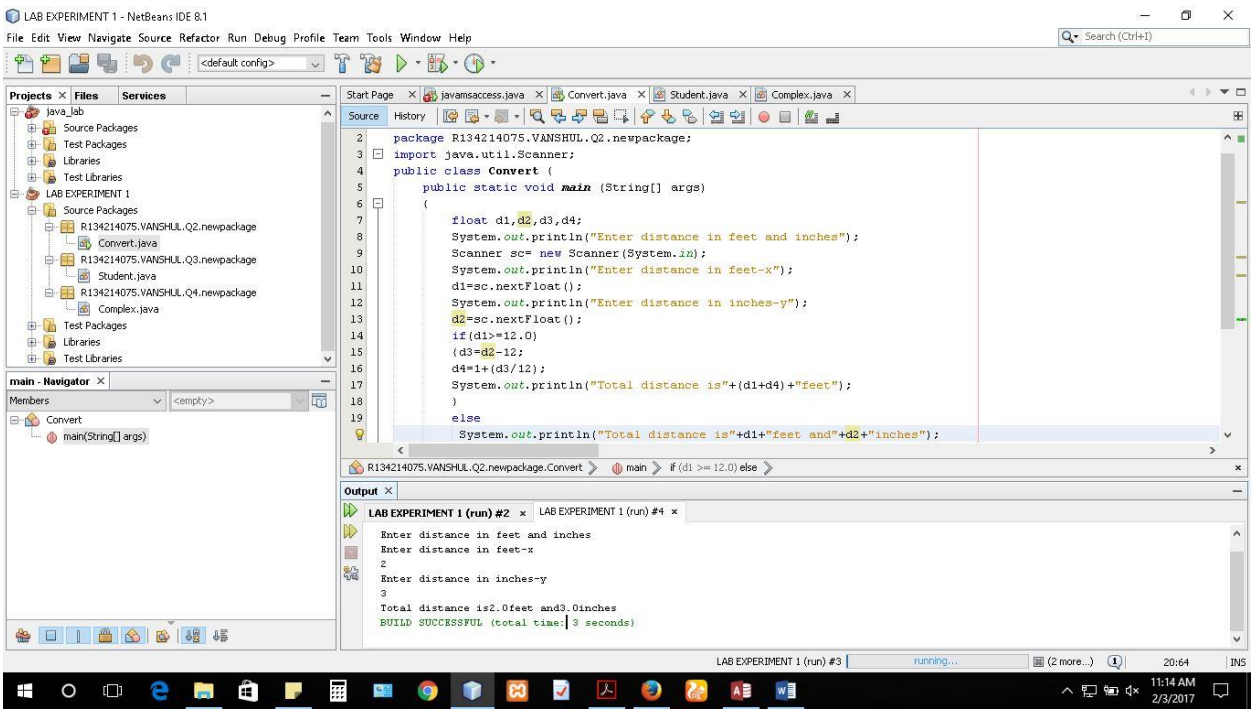
B.View provides different presentation of resources or ways of navigationg through the information in your workspace.

C. Perspective provides a convenient grouping of views and editors that match a particular way of using RAD.

Q2.WAP to input the distance in feet and inches, then display the distance in feet and inches (more than 12 inches should be converted into feet) by using classes and objects.

```
package R134214075.VANSHUL.Q2.newpackage;

import java.util.Scanner;

public class Convert {

   public static void main (String[] args)

   {

      float d1,d2,d3,d4;
```

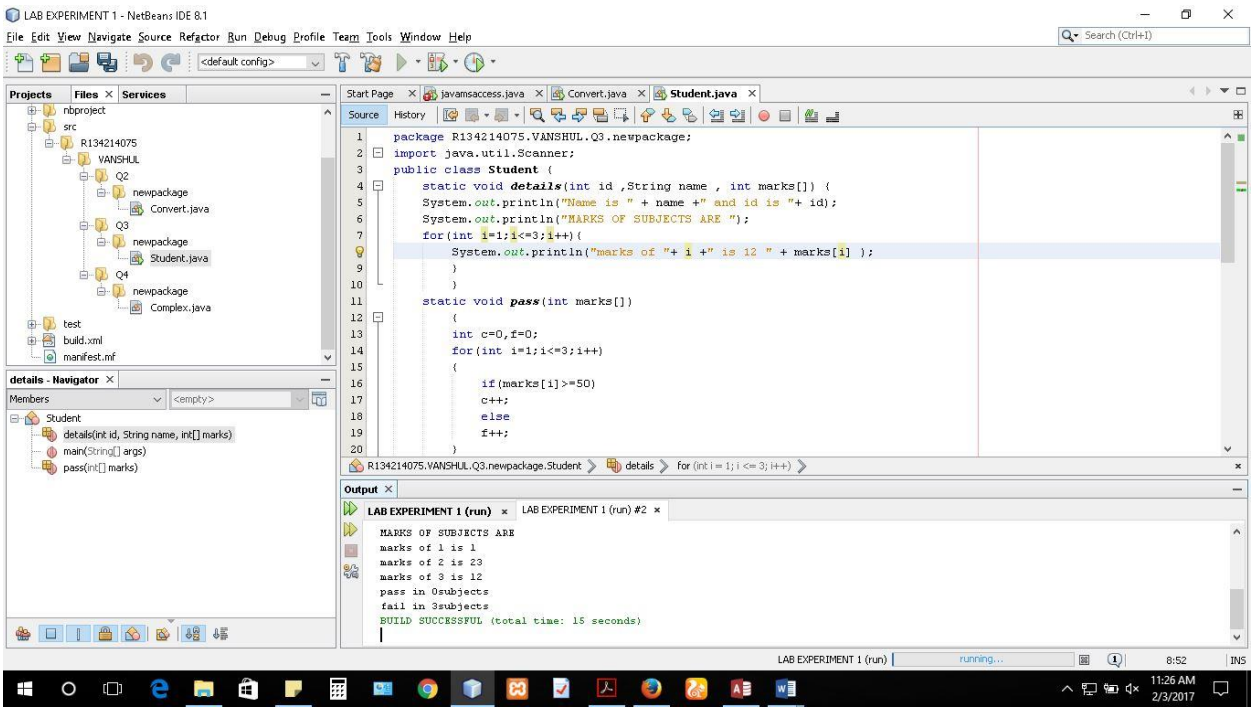
```
System.out.println("Enter distance in feet and inches");
Scanner sc= new Scanner(System.in);
System.out.println("Enter distance in feet-x");
d1=sc.nextFloat();
System.out.println("Enter distance in inches-y");
d2=sc.nextFloat();
if(d1>=12.0)
{d3=d2-12;
d4=1+(d3/12);
System.out.println("Total distance is"+(d1+d4)+"feet");
}
else
 System.out.println("Total distance is"+d1+"feet and"+d1+"inches");
}

}
```



Q3. Write a program to read students' details like id , name and marks of 3 subjects and find out how many students are passed / failed [pass marks =50@in each subject] and display the student details in ascending order based total. Take the input for number of students.

```
package R134214075.VANSHUL.Q3.newpackage;

import java.util.Scanner;

public class Student {
   static void details(int id ,String name , int marks[]) {
   System.out.println("Name is " + name +" and id is "+ id);
   System.out.println("MARKS OF SUBJECTS ARE ");
   for(int i=1;i<=3;i++){
      System.out.println("marks of "+ i +" is " + marks[i] );
          }
          }
   static void pass(int marks[])
          {
          int c=0,f=0;
          for(int i=1;i<=3;i++)
          {
         if(marks[i]>=50)
         c++;
         else
         f++;
          }
          System.out.println("pass in " +c + "subjects");
          System.out.println("fail in " +f + "subjects");
          }
   public static void main(String[] args){
```

```
Scanner sc =new Scanner (System.in);
System.out.println("Enter id");
int id = sc .nextInt();
System.out.println("Enter name");
String name =sc.next();
System.out.println("enter the marks of the students");
int marks[] =new int[5];
for (int i=1;i<=3;i++)
{
        marks[i]=sc.nextInt();
}
details(id,name,marks);
pass(marks);

        }

}
```

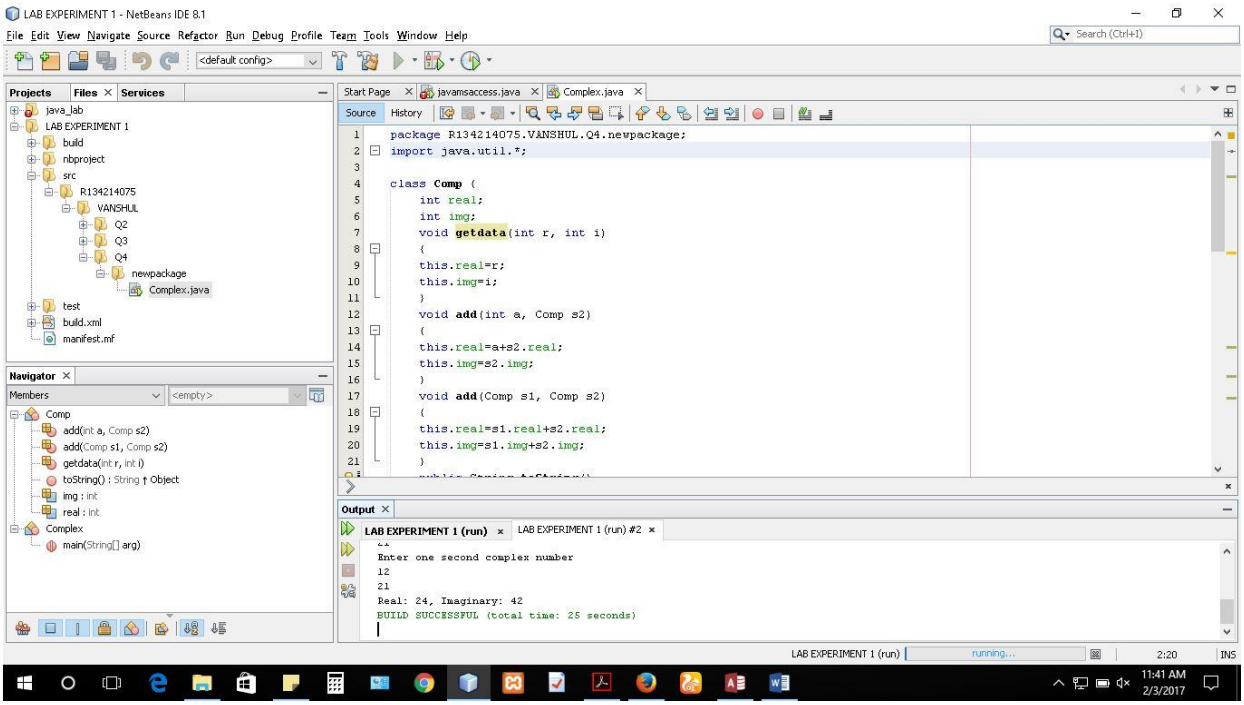


Q4. Write the Java Code program to create a class called COMPLEX and implement the following overloading functions ADD that return a COMPLEX number.
I. ADD (a, s2) - where a is an integer (real part) and s2 is a complex number.
II. ADD (s1, s2)-where s1 & s2 are complex numbers.

```
package R134214075.VANSHUL.Q4.newpackage;

import java.util.*;


class Comp {
   int real;
   int img;
   void getdata(int r, int i)
   {
   this.real=r;
   this.img=i;
   }
   void add(int a, Comp s2)
```

```
    {
    this.real=a+s2.real;
    this.img=s2.img;
    }
    void add(Comp s1, Comp s2)
    {
    this.real=s1.real+s2.real;
    this.img=s1.img+s2.img;
    }
    public String toString()
    {
    return "Real: "+real+", Imaginary: "+img;
    }
}
public class Complex
{
   public static void main(String arg[])
   {
   System.out.println("R134214006");
   Comp one=new Comp();
   Comp two=new Comp();
   Comp resu=new Comp();
   Scanner sc= new Scanner(System.in);
   System.out.println("Enter a real number");
   int real=sc.nextInt();
   System.out.println("Enter a complex number");
   int a=sc.nextInt();
```

```
    int b=sc.nextInt();
    one.getdata(a, b);
    resu.add(real,one);
    System.out.println(resu);
    System.out.println("Enter one first complex number");
    a=sc.nextInt();
    b=sc.nextInt();
    one.getdata(a, b);
    System.out.println("Enter one second complex number");
    a=sc.nextInt();
    b=sc.nextInt();
    two.getdata(a, b);
    resu.add(one,two);
    System.out.println(resu);
     }
}
```


LAB EXPERIMENT 1 - NetBeans IDE 8.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Files Services
java_lab
LAB EXPERIMENT 1
build
nbproject
src
R134214075
VANSHUL
Q2
Q3
Q4
newpackage
Complex.java
test
build.xml
manifest.mf
Navigator
Members
Comp
add(int a, Comp s2)
add(Comp s1, Comp s2)
getdata(int r, int i)
toString() : String ↑ Object
img : int
real : int
Complex
main(String[] arg)
Start Page
javamsaccess.java
Complex.java
Source
History
1 package R134214075.VANSHUL.Q4.newpackage;
2 import java.util.*;
3
4 class Comp {
5 int real;
6 int img;
7 void getdata(int r, int i)
8 {
9 this.real=r;
10 this.img=i;
11 }
12 void add(int a, Comp s2)
13 {
14 this.real=a+s2.real;
15 this.img=s2.img;
16 }
17 void add(Comp s1, Comp s2)
18 {
19 this.real=s1.real+s2.real;
20 this.img=s1.img+s2.img;
21 }
Output
LAB EXPERIMENT 1 (run)
LAB EXPERIMENT 1 (run) #2
Enter one second complex number
12
21
Real: 24, Imaginary: 42
BUILD SUCCESSFUL (total time: 25 seconds)
LAB EXPERIMENT 1 (run) running...
2:20
INS
11:41 AM
2/3/2017