

COMSATS University Islamabad

Department of Computer Science

Assignment-1 [CLO-1] [Marks 10] Due Date: 20/03/23

Q1. Rewrite the following code using object oriented approach.

```
1. import java.util.Scanner;
2. public class Test {
       public static void main(String[] args) {
4.
         Scanner input=new Scanner(System.in);
          String w1 name=null;
6.
          int w1_hours_worked = 0;
7.
          double w1 hourly wage=0.0;
8.
9.
          String w2_name=null;
10.
          int w2 hours worked = 0;
11.
          double w2 hourly wage=0.0;
12.
13.
          System.out.println("Enter the details of worker1");
14.
          System.out.print("Enter Name:");
15.
          w1 name=input.next();
16.
          System.out.print("Enter Hours worked:");
17.
          w1 hours worked=input.nextInt();
18.
          System.out.print("Enter Hourly wage:");
19.
          w1 hourly wage=input.nextDouble();
20.
21.
         System.out.println("Enter the details of worker2");
22.
         System.out.print("Enter Name:");
23.
         w2 name=input.next();
24.
         System.out.print("Enter Hours worked:");
25.
         w2 hours worked=input.nextInt();
26.
         System.out.print("Enter Hourly wage:");
27.
         w2 hourly wage=input.nextDouble();
28.
29.
         System.out.println("Name:"+w1 name+"\tPay is
   :"+calculate pay(w1 hours worked,w1 hourly wage));
30.
         System.out.println("\t\t\****\t\t\t");
31.
32.
         System.out.println("Name:"+w2 name+"\tPay
   is:"+calculate pay(w2 hours worked,w2 hourly wage));
         System.out.println("\t\t\t***\t\t\t");
33.
34.
35.
               public static double calculate pay(int hours, double wage){
36.
                  double pay=hours*wage;
37.
38.
                    if (hours > 40.0)
39.
                     pay = pay + (0.5 * wage * (hours - 40));
40.
41.
                    return pay;
42.
                 }
43.
```

Q2. Consider the concept of a flight and define a class for it in java. Identify necessary attributes to represent a flight. Assign appropriate data types and access specifiers to the data members of class. Also write the methods for the class.

Note:

The class must have at least five data members.

You may only write the signature of the methods.