

# Assignment-8(Lab-10)

By:- Anusthan Singh (20051337)

**Q1. 1. Define two packages as – General and Marketing. In General package define a class „employee“ with data members as emp\_id(protected), ename(private) and a public method as earnings() which calculate total earnings as earnings basic + DA (80% of basic) + HRA (15% of basic)  
In Marketing package define a class „sales“ which is extending from „employee“ class and has a method ta\_llowance() which calculates Travelling Allowance as 5% of total earning. Write the programs to find out total earning of a sales person for the given basic salary amount and print along with the emp\_id.**

**Code:-**

```
package Marketing;

import java.util.*; import General.*;

class Saleess {

    public static double tallowance(double e) { return e * 0.05;
}

    public static void main(String[] args) { Scanner sc = new Scanner(System.in);

    System.out.println("Please enter the Name,employee id and basic salary : ");
    String name = sc.nextLine();

    int id = sc.nextInt();

    double sal = sc.nextDouble();
```

```

Employee obj1 = new Employee(name, id, sal); obj1.printName();

double e = obj1.earnings();

System.out.println("Earnings : " + e); System.out.println("Travel allowance : " +
tallowance(e)); System.out.println("Employee ID : " + id);

sc.close();

}

}

package General; public class Employee {

    protected int empid; private String ename;

    private double basic, DA, HRA;

    public Employee(String n, int id, double b) { ename = n;
    basic = b; empid = id; DA = b * 0.8; HRA = b * 0.5;
    }

    public double earnings() { return basic + DA + HRA;
    }

    public void printName() { System.out.println("Name: " + ename);
    }

}

```

Output:-

```
Please enter the Name,employee id and
basic salary :
Hamdan
1905387
120000000
Earnings : 234000000
Travel allowance : 11700000
Employee ID : 1905387
```

Q2.

2. Write a program to perform following operations on user entered strings –

- i) Change the case of the string
- ii) Reverse the string
- iii) Compare two strings
- iv) Insert one string into another string
- V)Concatenation of string

**Code:-**

```
import java.util.Scanner;

public class q2 {

    public static void main(String[] args)

    {

        Scanner s=new Scanner(System.in);

        String a=s.nextLine();

        System.out.println("uper case : "+ a.toUpperCase());

        System.out.println("lower case : "+ a.toUpperCase());

        StringBuilder input1 = new StringBuilder();
```

```
input1.append(a);  
System.out.println("after reversing "+ input1.reverse());
```

```
System.out.println("enter second string : ");
```

```
Scanner s1=new Scanner(System.in);
```

```
String b=s1.nextLine();
```

```
System.out.println();
```

```
String c1=new String(a);
```

```
String c2=new String(b);
```

```
System.out.println(c1.equals(c2));
```

```
System.out.println(c1.equalsIgnoreCase(c2));
```

```
StringBuffer newString = new StringBuffer(c1);
```

```
System.out.println("enter sttring to insert ");
```

```
Scanner s3=new Scanner(System.in);
```

```
String c=s3.nextLine();
```

```
System.out.println("enter index no. string insert");
```

```
int ind=s3.nextInt();
```

```
newString.insert(ind, c);
```

```
System.out.println("after inserting " + newString);
```

```
System.out.println("after concatenation ");
```

```
a=a.concat(b);
```

```
System.out.println(a);
```

```
}
```

```
}
```

Output:-

```
shinchan
upper case : SHINCHAN
lower case : SHINCHAN
after reversing nahcnihs
enter second string :
nohara

false
false
enter sttring to insert
3
enter index no. string insert
4
after inserting shin3chan
after concatination
shinchannohara
```

By:- Anusthan Singh(20051337)