



KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)

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WT LAB -12

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Q1.java

```
// 1. Define two packages as - General and Marketing. In General package
define a class ,employee" with data members as empid(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 tallowance() 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.
import java.util.Scanner;
import marketing.*;

public class q1 {
    public static void main(String[] args) {
```

```

Scanner scan = new Scanner(System.in);
System.out.println("Enter employee name");
String name = scan.next();
System.out.println("Enter empid");
int id = scan.nextInt();
System.out.println("Enter basic salary");
int basic = scan.nextInt();
sales s = new sales(name, id);
s.printdetails();
System.out.println("Earnings");
System.out.println(s.earnings(basic));
System.out.println("Travel allowance");
System.out.println(s.tallowance(basic));
scan.close();
}
}

```

Sales.java

```

package marketing;

import general.*;

public class sales extends Employee {
    public sales(String name, int id) {
        super(name, id);
    }

    public double tallowance(int basic) {
        double earn = this.earnings(basic);
        double t = 0.05 * earn;
        return t;
    }
}

```

Employee.java

```

package general;

public class Employee {
    protected int empid;
    private String ename;
}

```

```

public Employee(String name, int id) {
    ename = name;
    empid = id;
}

public double earnings(int basic) {
    double earn = basic + (0.8 * basic) + (0.15 * basic);
    return earn;
}

public void printdetails() {
    System.out.println("Employee name");
    System.out.println(ename);
    System.out.println("Employee id");
    System.out.println(empid);
}
}

```

OUTPUT-1

```

Windows PowerShell
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PS D:\my codes\web tech lab\lab12_package> cd "d:\my codes\web tech lab\lab12_package\" ; if ($?) { javac q1.java } ;
if ($?) { java q1 }
Enter employee name
vikashdalmia
Enter empid
3213
Enter basic salary
20000
Employee name
vikashdalmia
Employee id
3213
Earnings
39000.0
Travel allowance
1950.0
PS D:\my codes\web tech lab\lab12_package> █

```

```
// 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
import java.util.*;

class q2 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String s;
        System.out.println("Enter a string");
        s = sc.nextLine();
        String s2 = "";
        for (int i = 0; i < s.length(); i++) {
            char ch = s.charAt(i);
            int t = ch;
            if (t >= 65 && t <= 90)
                ch = (char) (t + 32);
            else if (t >= 97 && t <= 122)
                ch = (char) (t - 32);
            s2 += ch;
        }
        System.out.println("The string after changing the case is " + s2);
        s2 = "";
        for (int i = s.length() - 1; i >= 0; i--)
            s2 += s.charAt(i);
        System.out.println("The string after reversing is " + s2);
        String s3;
        System.out.println("Enter the second string for comparison");
        s3 = sc.nextLine();
        System.out.println("The difference between ASCII value is " +
            s.compareTo(s3));
        System.out.println("Enter the string to be inserted into first string");
        s3 = sc.nextLine();
        System.out.println("The two strings after insertion is " + (s + s3));
        sc.close();
    }
}
```

OUTPUT -2

Windows PowerShell

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```
PS D:\my codes\web tech lab\lab12_package> cd "d:\my codes\web tech lab\lab12_package\" ; if ($?) { javac q2.java } ; if ($?) { java q2 }
```

Enter a string

hitu

The string after changing the case is HITU

The string after reversing is utih

Enter the second string for comparison

raj

The difference between ASCII value is -10

Enter the string to be inserted into first string

raj

The two strings after insertion is hituraj

```
PS D:\my codes\web tech lab\lab12_package> █
```

2005025_Hitu raj