

105. WAP in Java that accepts the name of a student and his marks in three subjects. Compute his total marks and percentage. Assume that there are 40 students in a class.
The final output should be the Report of all the students printed as follows :

****STUDENT REPORT****

Name	Eng. Marks	Math Marks	Comp. Marks	Total Percent
.....
.....
.....
.....

Ans. import java.io*;
public class test3
{

public static void main(String args[]) throws IOException

```
{
    BufferedReader buf = new BufferedReader(new InputStreamReader(System.in));
    String n[] = new String[40];
    int m1[] = new int[40];
    int m2[] = new int[40];
    int m3[] = new int[40];
    int t[] = new int[40];
    double p[] = new double [4];
    for(int i = 0; i < 1; i++)
    {
        System.out.println("Enter the name of a student");
        n[i] = obj.readLine();
        System.out.println("Enter the English marks of a student");
        String y = obj.readLine();
```

```

m1[i] = Integer.parseInt(y);
System.out.println("Enter the maths marks of a student");
String z = obj.readLine();
m2[i] = Integer.parseInt(z);
System.out.println("Enter the computer marks of a student");
String a = obj.readLine();
m3[i] = Integer.parseInt(a);
t[i] = m1[i] + m2[i] + m3[i];
p[i] = t[i]/300 * 100.0;
}
System.out.println("*****STUDENT REPORT*****");
System.out.println("Name EngMarks MathMarks CompMarks Total Percent");
for(int i = 0; i < 1; i++)
{
    System.out.println(n[i] + " " + m1[i] + " " + m2[i] + " " + m3[i] + " =" + t[i] + " " + p[i]);
}
}
}

```

106. WAP in Java that reads the following list of countries and their respective cities into arrays. The program should accept the name of a country in the list as input and print the corresponding city name as output. The program should give an error message when a city or a country is not in the list.

Ans. import java.io*;
public class test4

```

{
    public static void main(String args[]) throws IOException
    {
        String count[] = {"India", "China", "Japan", "Russia", "Sri Lanka"};
        String city[] = {"Delhi", "Beijing", "Tokyo", "Moscow", "Columbo"};
        boolean v = false;
        System.out.println("Enter the country whose city you want to know");
        BufferedReader obj = new BufferedReader(new InputStreamReader(System.in));
        String x = obj.readLine();
        for(int i = 0; i < 5; i++)
        {
            if(x.compareTo(count[i]) == 0)
            {
                v = true;
                System.out.println("City is" + city[i]);
            }
        }
        if(v == false)
        {
            System.out.println("Country not found");
        }
    }
}

```

107. A dealer sells (1) Badminton rackets (2) Shuttlecocks in boxes containing 10 each (3) Nets.
WAP to create a bill using the information given below :
Input : Date of purchase, name of buyer, price of each item, quantity of each item.

Output : BILLING DETAILS

S.No.	Item	Price	Quantity	Amount
.....
.....

Add 8% sales tax and print the net amount to be paid.

Ans. import java.io.*;

public class test5

{

 public static void main(String args[]) throws IOException

 {

 BufferedReader obj = new BufferedReader(new InputStreamReader(System.in));

 String item[] = new String[3];

 double price[] = new double[3];

 String date;

 int qty[] = new int[3];

 double amt[] = new double[3];

 System.out.println("Enter date of purchase");

 date = obj.readLine();

 System.out.println("Enter name");

 String nam = obj.readLine();

 double s = 0.0, sum = 0.0;

 for(int i = 0; i < 3; i++)

 {

 System.out.println("Enter the article");

 item[i] = obj.readLine();

 System.out.println("price of item");

 String p = obj.readLine();

 price[i] = Double.parseDouble(p);

 System.out.println("Quantity of item");

 String q = obj.readLine();

 qty[i] = Integer.parseInt(q);

 amt[i] = qty[i] * price[i];

 s = s + amt[i];

 }

 sum = s * (8.0/100) + s;

 System.out.println("BILLING DETAILS");

 System.out.println("S.No., Item Price, Quantity, Amount");

 for(int k = 0; k <= 2; k++)

 {

 int p = k + 1;

 System.out.println(p + " " + item[k] + " " + price[k] + " " + qty[k] + " " + amt[k]);

 System.out.println("net amount after adding 8% sales tax = Rs " + sum);

 }

 }

}

108. Write a program to reverse the array without using temporary variable.

```
Ans. import java.io.*;
import java.util.*;
class ReverseArray
{
public static void main(String args[]) throws IOException
{
int a[ ] = new int[10];
int i=0, j=0;
Scanner sc = new Scanner(System.in);
System.out.println("Enter elements of array =");
for(i=0; i<10; i++)
{
a[i] = sc.nextInt( );
}
System.out.println("Elements of the array are=");
for(i=0; i<10; i++)
{
System.out.print(" " + a[i]);
}
for(i=0, j=10-1; i < 10/2; i++, j--)
{
a[i] = a[i] + a[j];
a[j] = a[i] - a[j];
a[i] = a[i] - a[j];
}
System.out.print("\nReverse Array is=");
for(i=0; i<10; i++)
{
System.out.print(" " + a[i]);
}
}
}
```

109. Create a matrix of dimension 3×4 and display the elements in the form of rows and columns.

```
Ans. public class matrix1
{
public static void main(String args[])
{
int a[][] = {{1, 3, 4, 9}, {2, 4, 6, 7}, {3, 6, 8, 1}};
int i, j;
for(i = 0; i < 3; i++)
{
for(j = 0; j < 4; j++)
{
System.out.print(a[i][j] + " ");
}
System.out.println();
}
}
}
```