

WT LAB ASSIGNMENT - 8

NAME :- Aindrail Santra

Roll No. :- 2029044

Q1.

```
public class Employee
{
    String name;
    int employee_id;
    double salary;
    Employee()
    {
        name = "NULL";
        employee_id = 0;
        salary = 0.0d;
    }
    Employee(String a, int b, double c)
    {
        name = a;
        employee_id = b;
        salary = c;
    }
    Employee (Employee e)
    {
        name = e.name;
        employee_id = e.employee_id;
        salary = e.salary;
    }
    void show()
    {
        System.out.println("Name " + name);
        System.out.println("Employee id " + employee_id);
        System.out.println("Salary " + salary);
    }
    public static void main(String[] args)
    {
        Employee obj1 = new Employee();
        obj1.show();
        Employee obj2 = new Employee("Aindrail", 74, 50000);
        obj2.show();
        Employee obj3 = obj2;
        obj3.show();
    }
}
```

OUTPUT

```
PS C:\Users\KIIT\Downloads\react-challenge-march21-amazon-clone-master
> cd "c:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)\\" ; if ($?) {
javac Employee.java } ; if ($?) { java Employee }
Name NULL
Employee id 0
Salary 0.0
Name Soham
Employee id 74
Salary 50000.0
Name Soham
Employee id 74
Salary 50000.0
PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)>
```

Q2.

```
public class Area
{
    double res;
    Area(int r)
    {
        res = 3.14 * r * r;
    }
    Area(int b, int h)
    {
        res = (b * h)/2;
    }
    Area (int l, double w)
    {
        res = l * w;
    }
    void disp()
    {
        System.out.println("Area is " + res);
    }
    public static void main(String[] args)
    {
        Area obj = new Area(5);
        obj.disp();
        Area obj1 = new Area(5, 6);
        obj1.disp();
        Area obj2 = new Area(7, 8.0);
        obj2.disp();
    }
}
```

OUTPUT

```
Windows PowerShell
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PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)> cd "c:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)\\" ; if ($?) { javac Area.java } ; if ($?) { java Area }
Area is 78.5
Area is 15.0
Area is 56.0
PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)>
```

Q3.

```
public class Time
{
    int hours;
    int mins;
    int secs;
    Time ()
    {
        hours = 0;
        mins = 0;
        secs = 0;
    }
    Time (int a, int b, int c)
    {
        hours = a;
        mins = b;
        secs = c;
    }
    void add(Time obj, Time obj1)
    {
        secs = obj.secs + obj1.secs;
        if (secs >= 60)
        {
            secs = secs - 60;
            mins = mins + 1;
        }
        mins = obj.mins + obj1.mins;
        if (mins >= 60)
        {
            mins = mins - 60;
            hours = hours + 1;
        }
        hours = obj.hours + obj1.hours;
    }
    void sub(Time obj, Time obj1)
    {
        secs = obj.secs - obj1.secs;
        if (secs <= 0)
        {
            secs = secs + 60;
            mins = mins - 1;
        }
        mins = obj.mins - obj1.mins;
        if (mins <= 0)
        {
            mins = mins + 60;
            hours = hours - 1;
        }
        hours = obj.hours - obj1.hours;
    }
    void disp()
    {
        System.out.println("Time in hours, minutes and seconds : " + hours + ", " + mins + "
and " + secs);
    }
    public static void main(String []args)
    {
        Time t1 = new Time(1,25,35);
        t1.disp();
        Time t2 = new Time(0,10,20);
        t2.disp();
    }
}
```

```

        Time t3 = new Time(0,0,0);
        System.out.println("Addition");
        t3.add(t1,t2);
        Time t4 = new Time(0,0,0);
        System.out.println("Subtraction");
        t4.sub(t1,t2);
        t3.disp();
        t4.disp();
    }
}

```

OUTPUT

```

> cd "c:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)" ; if ($?) { javac Time.java } ; if ($?) { java Time }
Time in hours, minutes and seconds : 1, 25 and 35
Time in hours, minutes and seconds : 0, 10 and 20
Addition
Subtraction
Time in hours, minutes and seconds : 1, 35 and 55
Time in hours, minutes and seconds : 1, 15 and 15
PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)>

```

Q4.

```

public class Num
{
    static int n = 0;
    Num()
    {
        n++;
    }
    public static void main(String[] args)
    {
        Num obj1 = new Num();
        Num obj2 = new Num();
        Num obj3 = new Num();
        Num obj4 = new Num();
        System.out.println("Number of objects created : " + n);
    }
}

```

Q5.

```

import java.util.*;
public class Repeat
{
    public static void main(String []args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elements");
        int n = sc.nextInt();
        int a[] = new int[n];
        for (int i = 0; i < n; i++)
        {
            System.out.println("Enter the number");
            a[i] = sc.nextInt();
        }
    }
}

```

```

        for (int i = 0; i < n; i++)
        {
            int t = a[i];
            for(int j = i+1; j < n;j++)
            {
                if (t == a[j])
                {
                    System.out.println("Repeated element - " + a[j]);
                }
            }
        }
        sc.close();
    }
}

```

Q6.

```

import java.util.*;
public class sub {
    public static void main(String []args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elements");
        int n = sc.nextInt();
        int a[] = new int[n];
        for (int i = 0; i < n; i++)
        {
            System.out.println("Enter the number");
            a[i] = sc.nextInt();
        }
        for (int i = 0; i < n-1; i++)
        {
            if (a[i] - a[i+1] == 0)
            {
                System.out.println("Numbers are - " + a[i] + " " + a[i+1]);
            }
        }
        sc.close();
    }
}

```

Q7.

```

import java.util.*;
public class Transpose
{
    public static void main(String []args)
    {
        Scanner sc = new Scanner(System.in);
        int a[][] = new int[3][3];
        for (int i = 0; i < 3; i++)
        {
            for (int j = 0; j < 3; j++)
            {
                System.out.println("Enter the number");
                a[i][j] = sc.nextInt();
            }
        }
    }
}

```

```

        System.out.println("Matrix");
        for (int i = 0; i < 3; i++)
        {
            for (int j = 0; j < 3; j++)
            {
                System.out.print("  " + a[i][j]);
            }
            System.out.println();
        }
        for (int i = 0; i < 3; i++)
        {
            for (int j = 0; j < 3; j++)
            {
                int t = a[j][i];
                a[j][i] = a[i][j];
                a[i][j] = t;
            }
        }
        System.out.println("Transpose");
        for (int i = 0; i < 3; i++)
        {
            for (int j = 0; j < 3; j++)
            {
                System.out.print("  " + a[j][i]);
            }
            System.out.println();
        }
        sc.close();
    }
}

```

OUTPUT

```

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PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)> cd "c:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)\"; if ($?) { javac Transpose.java }; if ($?) { java Transpose }
Enter the number
1
Enter the number
2
Enter the number
3
Enter the number
4
Enter the number
5
Enter the number
5
Enter the number
4
Enter the number
3
Enter the number
2
Matrix
1 2 3
4 5 5
4 3 2
Transpose
1 4 4
2 5 3
3 5 2
PS C:\4th Sem\WEB Tech\Practical\8th_Class(28.2.2022)>

```