

Sprint 6: Implementing Modular Programming Using Functions

Practice Challenge – 6.1 – Fencing a barn

Ron wishes to renovate his barn. He thinks that creating fences and keeping the animals separately would help him feed the animals easily and prevent the problem of animals getting mixed. For this, he plans to divide the area into three parts. He wishes to have a square area for the chickens, a circular area for the ducks and a rectangular area for the cows. Write a program in Java to help Ron calculate the area of each fence separately.

Note: Write separate functions to calculate the area of each fence.

Sample Input:

```
Select an option from list to calculate area of fence
1. Square area for the chickens
2. Circular area for ducks
3. Rectangular area for cows

1
Enter side of square : 12
```

Sample Output:

```
Area of square fence for chickens is 144.0
```

Practice Challenge - 6.1 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint6_pc6.1.git

Practice Challenge - 6.2 – Hourly Wage Calculator

A steel manufacturing plant wishes to calculate the amount they need to pay to their daily wage employees. All workers are expected to work for 40 hours a week. Recently the management has decided to pay its employees double for every extra hour that they work. If an employee works for more than 40 hours in a week (that is excluding the weekends), the company would pay the employee double for every extra working hour. For example, if an employee works for 45 hours in a week, he gets 5 hours of double pay. The standard amount paid to all daily wage employees is \$12 per hour.

Write a Java program that takes the fixed pay for an hour and total number of hours worked as input, and calculates the wage of a worker depending on the number of hours worked and prints the total pay.

Note: Please note that the manufacturing plant does not allow an employee to work for more than 60 hours in a week.

Sample Input

```
Enter name of the employee
Tommy
Enter base pay of the employee
12
Enter number of hours worked by the employee
45
```

Sample Output

```
Name :: Tommy
Base pay :: 12.0$
Hours worked :: 45

Salary of employee :: 600.0$
```

Practice Challenge – 6.2 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint6_pc6.2.git