

## BIL111 - Programming

### Lab 3: Conditional Execution

In this lab, you will write two programs for the following problems.

**Problem 1: Salary Calculator** Develop a program that will determine the gross pay for each employee. The company pays “straight time” for the first 40 hours worked by each employee and pays “time-and-a-half” for all hours worked in excess of 40 hours. You’re given a list of the employees of the company, the number of hours each employee worked last week and the hourly rate of each employee. Your program should input this information for each employee and should determine and display the employee’s gross pay. Here is a sample input/output dialog:

```
Enter # of hours worked: 39
Enter hourly rate of the worker ($00.00): 10.00
Salary is $390.00
```

```
Enter # of hours worked: 40
Enter hourly rate of the worker ($00.00): 10.00
Salary is $400.00
```

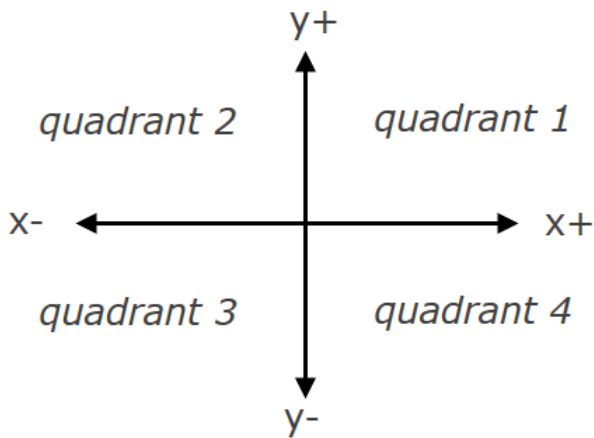
```
Enter # of hours worked: 41
Enter hourly rate of the worker ($00.00): 10.00
Salary is $415.00
```

**Problem 2: Quadrant** Develop a quadrant program that accepts a pair of real numbers  $x$  and  $y$  and returns the quadrant for that point according to the following figure:

Here is a sample input/output dialog:

```
Enter the x coordinate of the point: -4.2
Enter the y coordinate of the point: 17.3
```

The quadrant of this point is 2.



**Problem 3: Simple Statistics** Develop a program that will prompt user to provide three numbers as input, compute the maximum, minimum, and the average of these three numbers and then display this information on screen.

```
Please enter the first number: 3
Please enter the second number: 5
Please enter the third number: 7
```

```
Minimum: 3
Maximum: 7
Average: 5.0
```