# Lab: Complex Conditional Statements

Tasks for exercise in class and for homework to the course  ["Programming Fundamentals and Unit Testing" @ SoftUni](https://softuni.bg/trainings/4256/programming-fundamentals-and-unit-testing-september-2023).

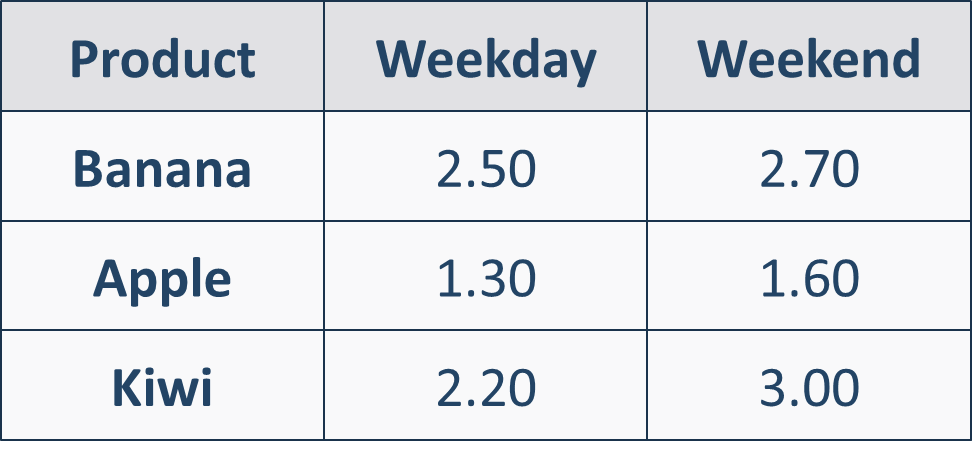
Test your tasks in the Judge system: [https://judge.softuni.org/Contests/4398](https://judge.softuni.org/Contests/4398%20)

## Marketplace

### Write a program that:

### Reads two strings from the console: product (string) and day (string).

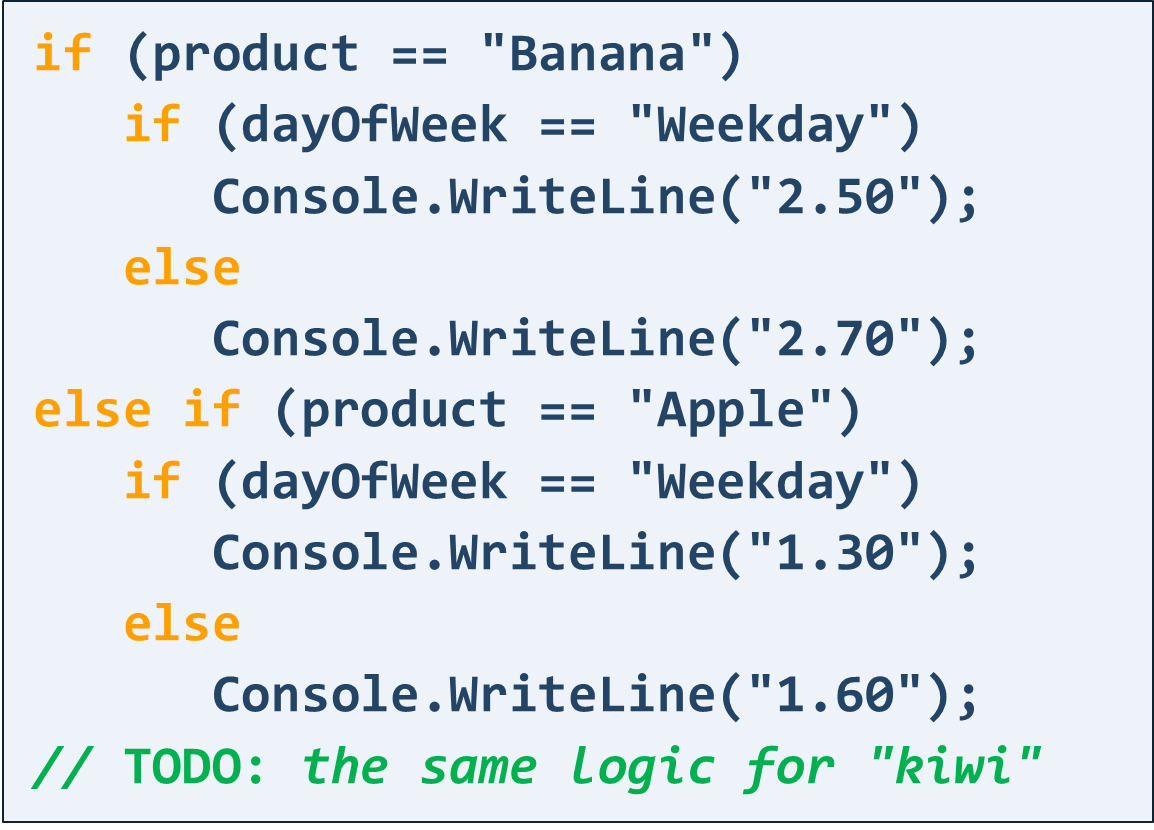
### Print the price, formatted to the second digit, based on the price table:



### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| Kiwi  Weekday | 2.20 | Banana  Weekend | 2.70 | Apple  Weekend | 1.60 |

### Guidelines



## Largest Number Out of Three

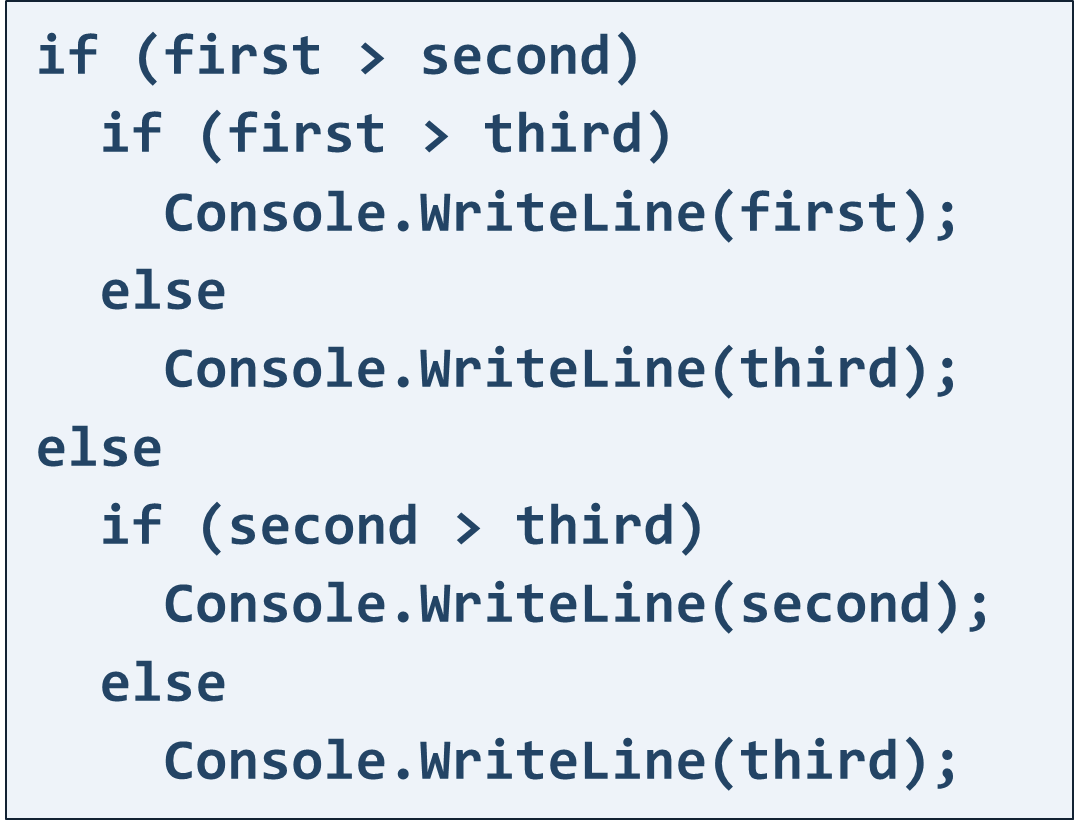
Write a program that:

* Reads **3 integer numbers** from the console
* Prints **the largest number**

### Example Input/Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 1  2  3 | 3 | -1  -5  -9 | -1 | 6  9  10 | 10 |

### Guidelines



## Bonus Score

Write a program that:

* Reads **points (integer number)** from the console
* Add **bonus points to given points** based on following:
  + If points are **between 0 and 3 (inclusive)**, adds 5 to the given points
  + If points are **between 4 and 6** **(inclusive)**, adds 15 to the given points
  + If points are **between 7 and 9** **(inclusive)**, adds 20 to the given points
* Print final points after adding the bonus points

### Example Input / Output

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| **1** | 6 | The given points are with value: **1**  This value is **between 0 and 3**, so we add **5** points to the given points:  **1** + **5** = 6 |
| **Input** | **Output** | **Comments** |
| **4** | 19 | The given points are with value: **4**  This value is **between 4 and 6**, so we add **15** points to the given points:  **4** + **15** = 19 |

## Food or Drink

Write a program that:

* Reads a **product (string)** from the console
* Based on type of the given product, print:
  + If product is one of following "**curry"**, "**noodles"**, "**sushi"**, "**spaghetti"** or "**bread"** you have to print **"food"**
  + If product is one of following "**tea"**, "**water"**, "**coffee"** or "**juice"** you have to print **"drink"**
  + If the product is different from listed products above, print **"unknown"**

### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| sushi | food | water | drink | car | unknown |

## Fruit or Vegetable

Write a program that:

* Reads a **product (string)** from the console
* Based on type of the given product, print:
  + If product is one of following "**banana"**, "**apple"**, "**kiwi"**, "**cherry"** or "**lemon"** you have to print **"fruit"**
  + If product is one of following "**cucumber"**, "**pepper"** or "**carrot"** you have to print **"vegetable"**
  + If the product is different from listed products above, print **"unknown"**

### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| banana | fruit | pepper | vegetable | table | unknown |

## Day of Week

Write a program to **print the day of week as words**, which:

* Reads **an integer number** (the number will be in range [1… 7]) from the console
* Based on the value of the number, print:
  + If the given number is equals to **1** print the first day of the week, which is "**Monday**"
  + If the given number is equals to **2** print the second day of the week, which is "**Tuesday**"
  + If the given number is equals to **3** print the third day of the week, which is "**Wednesday**"
  + If the given number is equals to **4** print the forth day of the week, which is "**Thursday**"
  + If the given number is equals to **5** print the fifth day of the week, which is "**Friday**"
  + If the given number is equals to **6** print the sixth day of the week, which is "**Saturday**"
  + If the given number is equals to **7** print the seventh day of the week, which is "**Sunday**"
  + If the given number **is out of the given range** print "**Error**"

### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 1 | Monday | 2 | Tuesday | 3 | Wednesday |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 4 | Thursday | 5 | Friday | 6 | Saturday |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 7 | Sunday | 10 | Error | -8 | Error |

## Vowel or Consonant

Write a program to **check a letter for vowel or consonant**:

* Reads a **character (letter, part of the English alphabet)** from the console
* Based on the value of the character, print:
  + If the character is **vowel letter** print "**Vowel**"

**Hint:** Vowels letters are: **A, a, E, e, I, i, O, o, U, u**

* + If the character is **consonant letter** print "**Consonant**"

### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| a | Vowel | A | Vowel | E | Vowel |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| e | Vowel | O | Vowel | d | Consonant |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| o | Vowel | U | Vowel | R | Consonant |

## Sorted Numbers

Write a program, which checks for **sorted 3 numbers**:

* Reads **3 real numbers** from the console
* Based on the order of the numbers, print:
  + **"Ascending"** – if the numbers are in ascending order (from the smallest to the largest number)
  + **"Descending"** – if the numbers are in descending order (from the largest to the smallest number)
  + **"Not** **sorted"** – in any other case

**Note:** Given numbers will not be equal.

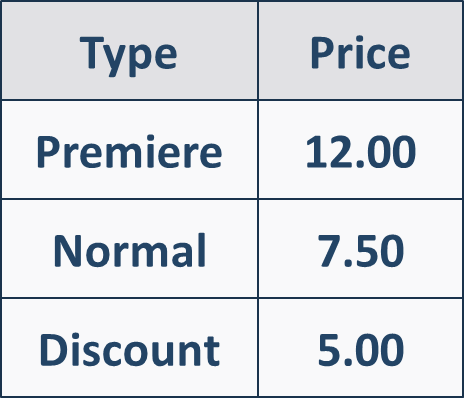
### Example Input / Output

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 1  2  3 | Ascending | 10  9  8 | Descending | 3  1  2 | Not sorted |

## Cinema

Write a program, that calculates **the price for all the tickets for a cinema movie**:

* Reads **the type of the movie (string), the count of the rows (an integer number)** and **count of the seats per row (an integer number)** in the cinema
  + Type of the movie will be one of the following: **"Premiere", "Normal"** and **"Discount"**
* Prints the **total price** for all seats formatted to the 2nd digit after the decimal point, based on the table below:



### Example Input/Output

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| Normal  12  9 | 810.00 | Type of the movie is Normaland the price for one seat is: 7.50  Total count of the seats in the cinema: 12 \* 9 = 108  Total price for all seats: 108 \* 7.50 = 810.00 |
| **Input** | **Output** | **Comments** |
| Premiere  10  5 | 600.00 | Type of the movie is Premiereand the price for one seat is: 12.00  Total count of the seats in the cinema: 10 \* 5 = 50  Total price for all seats: 50 \* 12.00 = 600.00 |