# Lab: Simple Conditional Statements

Submit your solutions here: <https://judge.softuni.org/Contests/4395/Simple-Conditional-Statements-Lab>

### 1. Freezing Weather

### Write a program to check for freezing water, that:

### Reads an integer number (temperature in Celsius)

### Checks whether the temperature is below zero

* Prints "**Freezing weather!**", if the temperature is **equal or smaller than 0**

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4 | *(no output)* |
| -2 | Freezing weather! |

### 2. Even or Odd

Write a program, that:

* Reads an **integer number**
* Check the number
  + If it's **even**, prints "**even**"
  + If it's **odd**, prints "**odd**"

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4 | even |
| 7 | odd |

### 3. Number 1…9 as Words

### Write a program to print a number as words, that:

### Reads an integer number

### Check number's value is in range [1 … 9]

### Print:

* + "**one**" – if the number is **1**
  + "**two**" – if the number is **2**
  + "**three**" – if the number is **3**
  + "**four**" – if the number is **4**
  + "**five**" – if the number is **5**
  + "**six**" – if the number is **6**
  + "**seven**" – if the number is **7**
  + "**eight**" – if the number is **8**
  + "**nine**" – if the number is **9**
  + "**Out of range**" - if the number is **out of range**

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 7 | seven |
| 10 | Out of range |
| 2 | two |

### 4. Greater Number

Write a program, that:

* Reads **two integer numbers**
* Finds the **greater number**
* Prints "**Greater number: {greater number value}**"

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 5  8 | Greater number: 8 |
| 10  1 | Greater number: 10 |

### 5. Guess the Password

Write a program for **checking a password**, that:

* Reads a **string** that represents a **password**
* Prints:
  + "**Welcome**" if the password is "**s3cr3t!**"
  + "**Wrong password!**" in all other cases

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| s3cr3t! | Welcome |
| qwerty | Wrong password! |

### 6. Boiling Water

Write a program to **check for boiling water**, that:

* + Reads an **integer** **number:** the water temperature (in °C)
  + Prints:
    - * "**The water is boiling**" if the **number > 100**
      * "**The water is not hot enough**" in all other cases

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 104 | The water is boiling |
| 29 | The water is not hot enough |

### 7. Speed Info

Write a program that:

* Reads a **floating-point number (speed)**
* Prints:
  + "**Slow**" - if the **number <= 30**
  + "**Fast**" - if the **number > 30**

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 30 | Slow |
| 60.4 | Fast |

### 8. Ticket Price

Write a program to **calculate ticket price**, that:

* Reads a **ticket type (string)**: either "**student**" or "**regular**"
* Prints the price in the following format **"${price}"**:
  + **Student** ticket price: **1.00**
  + **Regular** ticket price: **1.60**
  + For **invalid** type: "**Invalid ticket type!**"

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| student | $1.00 |
| regular | $1.60 |
| adult | Invalid ticket type! |

### 9. Area of Figures

Write a program to **calculate figure area**, that:

* Reads the **type of the figure** (string): "**square**", "**rectangle**" and "**circle**"
* Read:
  + If the figure is **square**: read **one floating-point number**, representing side of the square
  + If the figure is **rectangle**: read **two floating-point numbers**, representing **width** and **length** of the rectangle
  + If the figure is **circle**: read **one floating-point number**, representing **radius** of the circle
* Calculate area of the given figure
  + If the figure is square: **area = side \* side**
  + If the figure is rectangle: **area = width \* length**
  + If the figure is circle: **area = pi \* radius \* radius**
* Prints the **calculated area**, formatted to the 2nd decimal

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| square  5 | 25.00 |
| rectangle  5  4 | 20.00 |
| circle  3 | 28.27 |

### 10. Valid Triangle

Write a program to **check whether a triangle is valid**, which:

* Reads **three integers**: the **sides** of a **triangle**
* Checks if each **side** is **shorter** than the **sum** of the **other two**
* Prints:
  + "**Valid Triangle**" if the above condition is met
  + "**Invalid Triangle**" otherwise

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3  4  5 | Valid Triangle |
| 5  5  20 | Invalid Triangle |

### 11. Coffee Shop

Write a program to calculate the price for a drink, which:

* Reads a **drink name**: either "**coffee**" or "**tea**"
* Reads an **extra**: either "**sugar**" or "**no**"
* Prices are:
  + Coffee: **$1.00**
  + Tea: **$0.60**
  + Sugar: **$0.40**
* Prints the price, formatted to the **2nd decimal**: **"Final price: ${price}"**

### Example Input / Output

|  |  |
| --- | --- |
| **Input** | **Output** |
| coffee  sugar | Final price: $1.40 |
| tea  no | Final price: $0.60 |