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
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
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
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
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
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
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
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
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
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
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
coffee sugar	Final price: $1.40
tea no	Final price: $0.60