

# Lab: Data Types and Variables

Submit your solutions here: <https://judge.softuni.org/Contests/4625/Data-Types-and-Variables-Lab>

## 1. Days to Minutes

Write a program to convert **days to minutes**:

- Read a single **integer** (the **days** to be converted)
- Convert the days to minutes (1 day = 24 hours \* 60 minutes)
- Print the **minutes** in the following format: "**Minutes = {calculated minutes}**"

### Example

Input	Output
2	Minutes = 2880
5	Minutes = 7200
7	Minutes = 10080

## 2. Calculate Speed

Write a program that:

- Read **two floating-point numbers**: **distance** and **time**
- Calculate the speed needed to travel the specified distance for the specified time: **speed = distance / time**
- Print the **calculated speed** formatted to **2nd digit**

### Example

Input	Output
15 2	7.50
15 2.2	6.82

## 3. Circle Area and Perimeter

Write a program to calculate a **circle area and perimeter**:

- Read **one floating-point number**: the **radius of a circle**
- Calculate the **area** and the **perimeter** of a circle using formulas:
  - **area = radius \* radius \* pi**
  - **perimeter = 2 \* pi \* radius**
- Print the calculated values formatted to the 2<sup>nd</sup> digit after the decimal point in the following format:  
"Area = {area}"  
"Perimeter = {perimeter}"

## Example

Input	Output
7	Area = 153.94 Perimeter = 43.98

## 4. Convert Meters to Kilometers

Write a program that:

- Read a **floating-point number** (the **distance in meters**)
- Convert given **meters to kilometers** (1 km = 1000 meters)
- Print the **kilometers formatted** to the 2<sup>nd</sup> digit after the decimal point

## Example

Input	Output
1852.4	1.85
798.3	0.80

## 5. Convert Celsius to Fahrenheit

Write a program that:

- Read a **floating-point number** (the **temperature in Celsius**)
- Convert given **temperature in Fahrenheit** (1 Fahrenheit = 1 Celsius \* 1.8 + 32)
- Print the **temperature in Fahrenheit** formatted to the 2<sup>nd</sup> digit after the decimal point

## Example

Input	Output
37	98.60
100	212.00

## 6. Pets Food

Write a program that:

- Reads **two integer numbers: count packages dog food** and **count packages cat food**
- Calculate the expenses for pet's food, if you know that:
  - one package dog food costs 2.50 leva
  - one package cat food costs 4.00 leva
- Print the **calculated expenses** formatted to **2nd digit** in the following format:  
**"{expenses} lv."**

## Example

Input	Output
5 4	28.50 lv.
13 9	68.50 lv.

## 7. Projects Creation

Write a program that:

- Reads **text (architecture's name)** and **integer number (count of projects for creation)**
- Calculate how many hours will be needed for projects creation, if you know:
  - one project creation takes **3 hours**
- Print the **data** in the following format:

"The architect {architecture's name} will need {needed hours} hours to complete {count of projects for creation} project/s."

## Example

Input	Output
George 4	The architect George will need 12 hours to complete 4 project/s.
Sanya 9	The architect Sanya will need 27 hours to complete 9 project/s.