Programming Assignment 2.1

1. Problem definition

The purpose of this program is to calculate and display the percentage of male and female students. The user inputs two numbers, one for males and one for females, and this program will get the total number of students and the percentage of males and females.

1. Input and Output

* Input: two integer values for the number of males and the number of females
* Output: One int number for the total number of students, and two float numbers for the percentage of males and females

1. Variables

* Int total\_males = User inputs the number of male students
* Int total\_females = User inputs the number of females students
* Int total\_students = variable use to storage the calculation of total students
* Float m\_perc = variable use to storage the calculation of male percentage
* Float f\_perc = variable use to storage the calculation of female percentage

1. Flow Chart

End

Print the number of students - print(“ The number of students: “f”{total\_students}”)

Print the number of males and females – print(“The number of males and females: “f’{total\_males} \t {total\_females}’)

Print the percentage of males and females – print(“The percentage of males and females: “f’{m\_perc:.2f} % \t {f\_perc:.2f} %’)

Calculate the percentage of males and females students

m\_perc = (int(total\_males) / total\_students) \*100

f\_perc = (int(total\_females) / total\_students) \*100

Calculate the total number of students.

total\_students=total\_males+total\_females

Ask the user to enter two values, the number of male and female students.

total\_males, total\_females

Start

A screenshot of a computer

Description automatically generated

1. Errors and Lessons

Display the percentage

* The percentage was showing on decimal number ejm: 0.60
* Fix: using the format :.2f after the name of our variable we are able to display the number on console

Error on console

* The error message on console was TypeError: unsupported operant type(s) /: ‘str’ and ‘str’
* Fix: we convert our string from the input to and int number.

Lessons

* I learned about the math operations in python and I also learn about all the formats there are, I try the format “:.0%” and it was giving me the same result as if I was using “:.2f”