# C++ Programming
# Variables Homework 1

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# Problem #1: Math operations

- Write a program that reads 2 numbers and **print** their + - * / as following
  - For inputs 12 and 3
- Do good testing for your code
  - E.g. consider zero as first or 2nd number
  - E.g. consider negative values
  - E.g. even and odd values
  - E.g. try the MAX of int: 2147483647

```
12 3
12 + 3 = 15
12 - 3 = 9
12 / 3 = 4
12 * 3 = 36
```

# Problem #2: Students grades

- Write a program that reads 2 students information about math exam
  - Read per student: name, id and grade
  - Then print them. See the picture
- Be a good software engineer
  - Think deeply in your selected data types
  - The teacher gives us this dialogue to guide us
  - Be careful from your assumptions?
    - Is exam's grade an integer?

```
What is student 1 name: mostafa
His id: 111
His math exam grade: 20
What is student 2 name: ALI
His id: 555
His math exam grade: 30

Students grades in math
mostafa (with id 111) got grade: 20
ALI (with id 555) got grade: 30
Average grade is 25
```

# Problem #3: Even and Odd [sum](#)

- Given 8 space-separated integers, find the sum of those in **even** places and the sum of those in **odd** places.
    - Note: Even place means the 2nd, 4th, 6th or 8th numbers,
      odd places are the 1st, 3rd, 5th and 7th numbers.
    - Note: the 8 numbers will be on the same line
    - Note: Don't print any welcome or by messages.
- **Input**: 11 2 7 9 12 -8 3 -1
- **Output**: 2 33
- Example Explanation:
    - 2 + 9 + (-8) + (-1) = 2  for the even places
    - 11 + 7 + 12 + 3 = 33   for the odd places

"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."