

# CA Assignment 1 - IAS Computer

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## 1 About the Project

- This is an implementation of the IAS Computer
- Programming Language Used: Python 3.6.9
- It emulates the Fetch, Decode and Execute cycle for a variety of instructions(For positive and negative numbers):
  - Load
  - Store
  - Jump (Conditional and Unconditional)
  - Add
  - Subtract
  - Left and Right Shifts
  - Halt and Void

## 2 Project Format

- This project has 10 files:
  - 2 IAS Computer files
  - 2 ordinary high level python files
  - This file ( in .pdf and .tex)
  - 4 pictures of sample input - output

## 3 Running the Programs

### 3.1 For the first program

- `python3 ias1.py`
- You will be asked to input two numbers,  $a$  and  $b$ .

### 3.2 For the second program

- `python3 ias2.py`
- You will be asked to input four numbers,  $a$ ,  $b$ ,  $c$  and  $d$ .