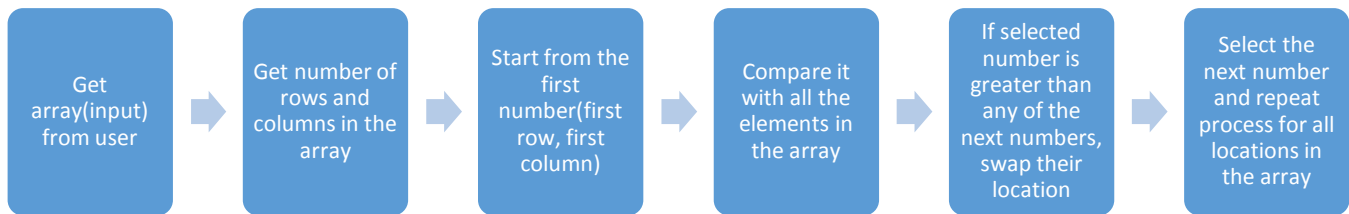


Home Work 3.1

1. Use execution control statements to sort an array in ascending order which is entered by the user
2. Now sort the same array using MATLAB's inbuilt command `sort()`

Hints for HW3.1:

- Use `input()` to get the array from the user
- Use `if`, `if-elseif`, `for` and other statements to develop an algorithm following the flow mentioned below



Home Work 3.2

1. Write a user-written function that will calculate volume and area of a cylinder for dimensions, the height and the radius provided by the user
2. For the cylinder in the Q1 if we are required to paint the complete cylinder find how much paint is required
3. If the cylinder in Q1 is made up of Aluminum, find how much would be the material cost involved.
4. Now print all the results/details using '`fprintf()`'

Hints for HW3.2:

- Use `input()` to get height and radius of the cylinder
- Use geometrical formulas to get volume($\text{base_area} \times \text{height}$) and surface area of the cylinder($\text{base_circumference} \times \text{height} + \text{base_area} \times 2$)
- Find rate of Aluminum from online resources(Google,etc)eg. 0.85\$/lb
- Find mass of the cylinder using density of Aluminum and use the rate you found
- Use `fprintf()` to print a statement which gives all the details that were asked in the HW3.2 including the specifications of the cylinder