Tutorial 3

ECSE103L (Computational thinking with programming)

1. What will be the output?

a.
`for x in (340,'abc',340.67,True):`
`  Print(type(x))`
	b.
	`for x in range(2,10,2):`
	`  print(x+2)`

c.
`for x in range(0,10):`
`  x=x+3`
`  print(x)`
	d.
	`for y in range(5):`
	`  for x in range(y):`
	`  print(x)`

e.
`for y in range(5):`
`  for x in range(y):`
`  print(y)`
	f.
	`for x in (10,20,50,74,84,66,12,25):`
	`  print(x)`
	`  if(x>50):`
	`  continue`
	`  print(x+5)`

g.
`for x in (10,20,50,74,84,66,12,25):`
`  print(x)`
`  if(x>50):`
`  break`
`  print(x+5)`
	h.
	`for x in (10,20,50,74,84,66,12,25):`
	`  print(x)`
	`  if(x>50):`
	`  break`
	`  print(x+5)`

i.
`for x in (10,20,50,74,84,66,12,25):`
`  print(x)`
`  if(x>50):`
`  continue`
`  print(x+5)`
	j.
	`nw =''`
	`for x in 'hello students':`
	`  nw=x+nw`
	`print(nw)`

2. Make a flow diagram to check whether a number entered by the users is an Armstrong number or not. 153 is an Armstrong number as $153 = 1^3+5^3+3^3$ while 125 is not an Armstrong number because $125 \neq 1^3+2^3+5^3$.
3. Write python program to find all Armstrong number between 1 to 1000.
4. 2520 is the smallest number that can be divided by each of the numbers from 1 to 10 without any remainder. What is the smallest positive number that is divisible by all the numbers from 1 to 20?