

## Name Validation

- M Srilalitha
- Srilalitha M
- M.Srilalitha
- M Sri Lalitha
- Sri Lalitha Mulpuru
- Mulpuru Srilatha

In [1]:

```
1 import re
2 pattern = "[A-Z][A-Za-z]{0,10}[.]{0,1}[ ]?[A-Z][A-Za-z]{2,10}[ ]{0,1}[A-z]{0,1}[A-Za-z]{0,10}"
3 n = input()
4 re.match(pattern,n)
```

M Srilalitha

Out[1]:

<re.Match object; span=(0, 12), match='M Srilalitha'>

- 67345321986
- 067345321986
- 9167345321986
- +9167345321986

In [7]:

```
1 pattern = "[+]{0,1}[9][1][6-9][0-9]{9}[0]{0,1}[6-9][0-9]{9}"
2 n = input()
3 re.match(pattern,n)
```

917865455439

## Email Validator

- [srilalitha11234.m@apssdc.in](mailto:srilalitha11234.m@apssdc.in) (<mailto:srilalitha11234.m@apssdc.in>)
- all letters must be lowercase alphabets ==> 6 max 14
- contains some numbers (optional) ==> 1 to 6
- it may contain special characters(optional) ==> .[&.-]
- after special character must contain number or digits
- must contain @
- must contains some alphabets ==> length 4-8
- must contain .
- must contains some alphabets ==> length 2-4

## Comprehensions

\*\*Comprehensions are used to reduce the number of lines of code

## Types

- list comprehension
- Set comprehension
- Dictionary Comprehension

## List Comprehension

Syntax:

- if only if condition is there==>[output loop Condition]
- if contains both if and else==>[output(if) condition loop]

In [8]:

```
1 l = [1,2,3,4,5,6,7,8,9] # output:even numbers
2 for i in l:
3     if i%2==0:
4         print(i)
```

2  
4  
6  
8

In [12]:

```
1 l = [1,2,3,4,5,6,7,8,9] # output:even numbers [2,4,6,8]
2 l1 = []
3 for i in l:
4     if i%2==0:
5         l1.append(i)
6 print("Even Numbers:",l1)
```

Even Numbers: [2, 4, 6, 8]

In [11]:

```
1 ## List Comprehension
2 [i for i in l if i%2==0]
```

Out[11]:

[2, 4, 6, 8]

In [13]:

```
1 ## List Comprehension
2 s = [i for i in l if i%2==0]
3 print("Even Numbers:",s)
```

Even Numbers: [2, 4, 6, 8]

In [14]:

```
1 ["Even" if i%2==0 else "odd" for i in l]
```

Out[14]:

```
['odd', 'Even', 'odd', 'Even', 'odd', 'Even', 'odd', 'Even', 'odd']
```

In [15]:

```
1 l = [1,2,3,4,"a","b"]  
2 [i for i in l if str(i).isalpha()] #1,2,3 #"1","2"
```

Out[15]:

```
['a', 'b']
```

In [ ]:

```
1
```