CASE STUDY 3: Arrays

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CS-3B

PROBLEM:

In seven days, cricket tournament, two matches per day has been decided. The climate conditions are not favorable, so the day wise probability is given. Find out how many matches can be scheduled in a tournament by considering the rain probability.

Constraint:
If the rain probability of a day is >=0.5 then no match will be scheduled.
If the rain probability of the day is >=0.1 then only one match will be scheduled on a day.
Otherwise two matches must be scheduled on a day.

SOLUTION CODE:

```
import numpy as np
match=0
for i in range(7):
    n=float(input('Input the rain probability - '))
    prob=np.append(prob,n)
    if n>=0.1 and n<0.5:
        match+=1
    if n>=0.5:
        match+=2
print("Number of matches that will be played are - "+str(14-match))
```

OUTPUT:

In [18]:
```
import numpy as np
```

In [19]:
```
prob=np.array([]).astype(float)
```

In [26]:
```
match=0
for i in range(7):
    n=float(input('Input the rain probability - '))
    prob=np.append(prob,n)
    if n>=0.1 and n<0.5:
        match+=1
    if n>=0.5:
        match+=2
```

```
Input the rain probability - 0.04
Input the rain probability - 0.08
Input the rain probability - 0.7
Input the rain probability - 0.4
Input the rain probability - 0.02
Input the rain probability - 0.2
Input the rain probability - 0.4
```

In [27]:
```
print("Number of matches that will be played are - "+str(14-match))
```

```
Number of matches that will be played are - 9
```