PYTHON SETS

Q1. What is a set in Python?
Ans. In Python, we create sets by placing all the elements inside curly braces {} , separated by comma. A set can have any number of items and they may be of different types (integer, float, tuple, string etc.). But a set cannot have mutable elements like lists, sets or dictionaries as its elements.

Q2. How do you create a set in Python?
Ans. We create sets by placing all the elements inside curly braces {} , separated by comma.

```
In [2]: a = {1,2,3,4,5,6,6,7,10, 'India'}
```

```
In [3]: type(a)
```
Out[3]: set

Q3. How do you add elements to a set in Python?
Ans. You can add an item to a set in Python by using the add() method with the new item to be added passed in as a parameter.

```
In [4]: s = {23,78, 90,34,87,19,30}
```

```
In [6]: s.add('India')
        s
```
Out[6]: {19, 23, 30, 34, 78, 87, 90, 'India'}

Q4. How do you remove elements from a set in Python?
Ans. We can remove elements from set by sing remove() function, discard() function or pop() function

```
In [7]: l = {91, 89, 45, 32, 90, 56, 25}
```

```
In [8]: l.remove(45) #removes the given element
```

```
In [9]: l
```
Out[9]: {25, 32, 56, 89, 90, 91}

```
In [10]: l.discard(25) #removes the given element
```

```
In [11]: l
```

Out[11]: {32, 56, 89, 90, 91}

```
In [12]: l.pop() #removes element randomly
```

Out[12]: 32

```
In [13]: l
```

Out[13]: {56, 89, 90, 91}

Q5. How do you get the length of a set in Python?
Ans. To get the length of a set we can use len() function.

```
In [14]: a1 = {78,89,65,62,90,13}
```

```
In [16]: len(a1)
```

Out[16]: 6