Q1. Explain the key featu$es of Python that make python popular.

ans1) 1. easy to learn

2. widely used in the industries.
3. python has lots of libraries.
4. python has huge active community.

Start coding or generate v

```python
#ans2) Python Keywords are some prede
print ("pws")
```

pws

```python
#ans3 immutable
t1=(0,3,5,6)
t1[2]=6
print (t1)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-3-40dca5d0b058> in <cell line: 3>()
      1 #ans3 immutable
      2 t1=(0,3,5,6)
----> 3 t1[2]=6
      4 print (t1)

TypeError: 'tuple' object does not support item assignment
```

```python
#mutable
l1=[2,4,8,9,0]
l1.append(5)
print (l1)
```

[2, 4, 8, 9, 0, 5]

```python
#ans4 operators are special symbols that  perform operationson variables and va
print(5+9) #addition
print(5-4)# subtraction
print(3*4)#multiple
print(5%4)#modulo
a="deepika"# membership
"i" in a
```

```
14
1
12
1
True
```

Ans5 type Casting in Python:

Python Implicit Type Conversion Python Explicit Type Conversion

```python
# implicit type Casting

# Python automatically converts
# a to int
a = 7
print(type(a))

# Python automatically converts
# b to float
b = 3.0
print(type(b))

# Python automatically converts
# c to float as it is a float addition
c = a + b
print(c)
print(type(c))

# Python automatically converts
# d to float as it is a float multiplication
d = a * b
print(d)
print(type(d))
```

```
<class 'int'>
<class 'float'>
10.0
<class 'float'>
21.0
<class 'float'>
```

```python
 #ans 6
a = 33
b = 200
if b > a:
  print("b is greater than a")
```

⮆ b is greater than a


```python
#Ans7
fruits = ["apple", "banana", "cherry"]
for x in fruits:
  print(x)
```

⮆ apple
    banana
    cherry