Title : Python Basic Assignment-17
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1. Assign the value 7 to the variable guess_me. Then, write the conditional tests (if, else, and elif) to print the string 'too low' if guess_me is less than 7, 'too high' if greater than 7, and 'just right' if equal to 7.

```
guess_me = 7

if(guess_me < 7):

  print("Too Low")

elif(guess_me == 7):

  print("Just Right")

else:

  print("Too High")

>>> Just Right
```

2. Assign the value 7 to the variable guess_me and the value 1 to the variable start. Write a while loop that compares start with guess_me. Print too low if start is less than guess me. If start equals guess_me, print 'found it!' and exit the loop. If start is greater than guess_me, print 'oops' and exit the loop. Increment start at the end of the loop.

```
guess_me = 7

start = 1



while(start <= guess_me):

  if(guess_me > start):

    print("Too Low")

  elif(guess_me == start):

    print("Found It!")

  else:
```

```
    print("Oops")

  start = start + 1
```

3. Print the following values of the list [3, 2, 1, 0] using a for loop.

```
list = [3,2,1,0]

for i in list:

  print(i)

>>> 3

2

1

0
```

4. Use a list comprehension to make a list of the even numbers in range(10)

```
list = [i for i in range(10) if i%2==0]

list

>>> [0, 2, 4, 6, 8]
```

5. Use a dictionary comprehension to create the dictionary squares. Use range(10) to return the keys, and use the square of each key as its value.

```
square_dict = {num: num*num for num in range(10)}

print(square_dict)

>>> {0: 0, 1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81}
```

6. Construct the set odd from the odd numbers in the range using a set comprehension (10).

```
odd = set(i for i in range(10) if i%2!=0)

>>> {1, 3, 5, 7, 9}
```

7. Use a generator comprehension to return the string 'Got ' and a number for the numbers in range(10). Iterate through this by using a for loop.

```
gen = (['Got',x] for x in range(1,11))

for i in gen:

  print(i)
```

8. Define a function called good that returns the list ['Harry', 'Ron', 'Hermione'].

```
def good():

  return ['Harry', 'Ron', 'Hermione']

list = good()

list

>>> ['Harry', 'Ron', 'Hermione']
```

9. Define a generator function called get_odds that returns the odd numbers from range(10). Use a for loop to find and print the third value returned.

```
def get_odds():

  for i in range(10):

    if i%2!=0:

      yield i

for index,value in enumerate(get_odds()):

    if(index == 2):

      print(value)

>>> 5
```

10. Define an exception called OopsException. Raise this exception to see what happens. Then write the code to catch this exception and print 'Caught an oops'.

```
try:

  a = int(input("Enter a positive integer: "))
```

```
  if a <= 0:
    raise ValueError("That is not a positive number!")
except ValueError as ve:
    print(ve)
```

11. Use zip() to make a dictionary called movies that pairs these lists: titles = ['Creature of Habit', 'Crewel Fate'] and plots = ['A nun turns into a monster', 'A haunted yarn shop'].

```
dict(zip(titles,plots))

>>> {'Creature of Habit': 'A nun turns into a monster',
 'Crewel Fate': 'A haunted yarn shop'}
```