File handling:

Open the file "demofile2.txt" and append content to the file:

```
f = open("demofile2.txt", "a")
f.write("Now the file has more content!")
f.close()

#open and read the file after the appending:
f = open("demofile2.txt", "r")
print(f.read())
```

Run Example »

Example

Using the `append()` method to append an item:

```
thislist = ["apple", "banana", "cherry"]
thislist.append("orange")
print(thislist)
```

Try it Yourself »

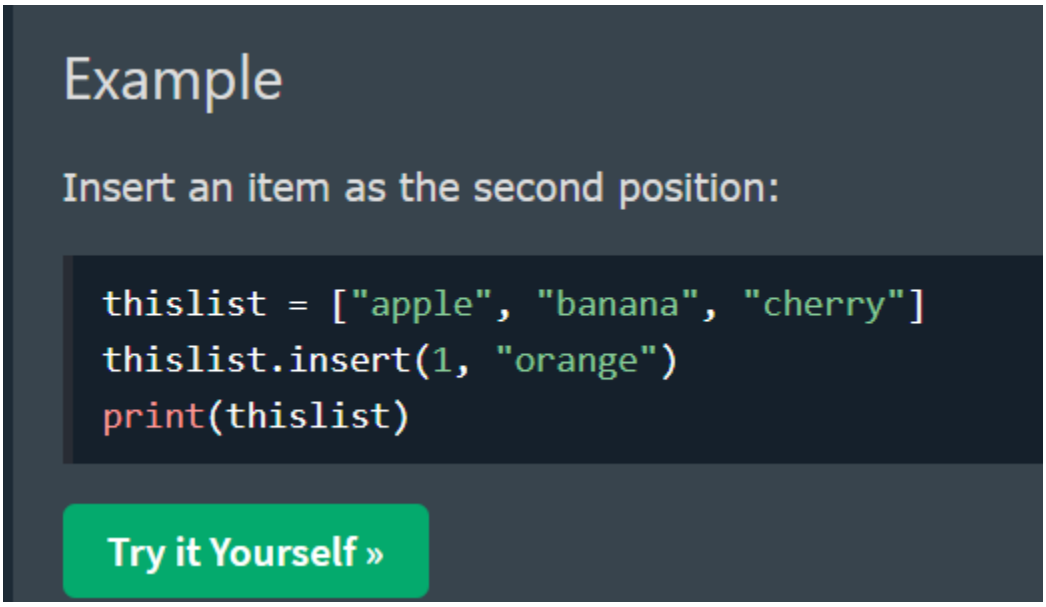
python

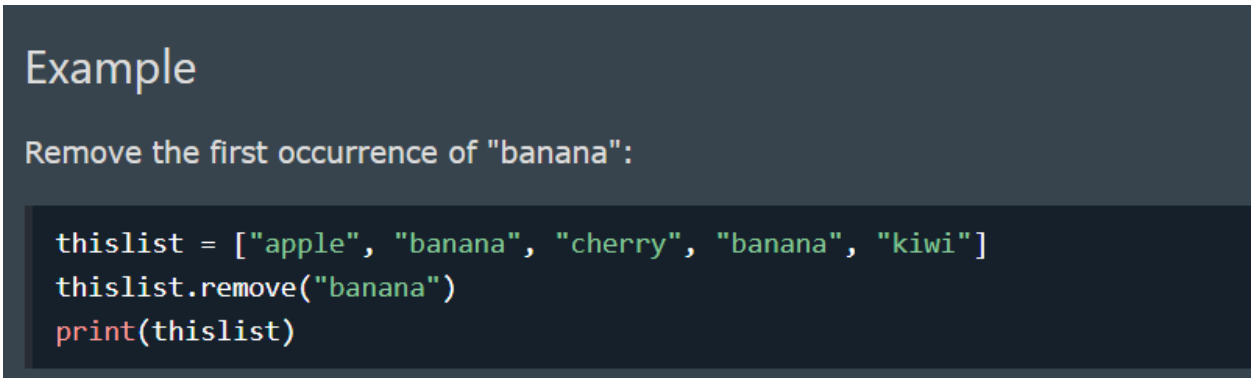
```python
# Opening a file in read mode
file = open("example.txt", "r")

# Reading content
content = file.read()

# Display content
print("File content:\n", content)

# Closing the file
file.close()
```

Code:

```python
# Opening a file in write mode
file = open("output.txt", "w")

# Writing data into file
file.write("This is a sample file written using Python.")

# Closing the file
file.close()

# Reopen to verify
file = open("output.txt", "r")
print("File content:", file.read())
file.close()
```

List:





Example

```
fruits = ["apple", "banana", "cherry", "kiwi", "mango"]
newlist = []

for x in fruits:
  if "a" in x:
    newlist.append(x)

print(newlist)
```

Try it Yourself »

IF-ELSE

```
amount = float(input("Enter the purchase amount: "))

if amount > 10000:
    discount = amount * 0.20
elif amount >= 5000:
    discount = amount * 0.10
elif amount >= 1000:
    discount = amount * 0.05
else:
    discount = 0

final_amount = amount - discount

print("Discount given: ₹", discount)
print("Final amount to be paid: ₹", final_amount)
```

Sample Output:

yaml

```
Enter the purchase amount: 12000
Discount given: ₹ 2400.0
Final amount to be paid: ₹ 9600.0
```

Ask anything

Excepshion:

Code:

python

```python
string = "Venkatanagarsimharajuvaripeta"

for char in string:
    if char != 'a' and char != 'e':
        print(char, end="")
```

Code:

python

```python
sum_of_squares = 0

for i in range(1, 11):
    sum_of_squares += i * i

print("Sum of squares from 1 to 10 is:", sum_of_squares)
```

Class

Q2. a) Create a class FYCY with roll number and name

Code:

python Copy

```python
class FYCY:
    def __init__(self, roll_no, student_name):
        self.roll_no = roll_no
        self.student_name = student_name

    def display(self):
        print("Roll Number:", self.roll_no)
        print("Student Name:", self.student_name)

# Creating object and passing values
student1 = FYCY(101, "Aarav Patil")
student1.display()
```

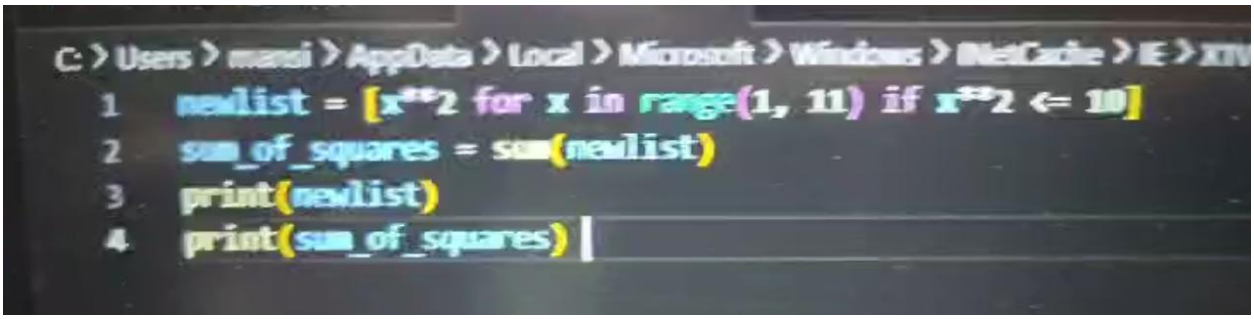
```python
class SET:
    def __init__(self, course_name):
        self.course_name = course_name

    def display(self):
        print("SET Department:", self.course_name)

class SCM:
    def __init__(self, course_name):
        self.course_name = course_name

    def display(self):
        print("SCM Department:", self.course_name)

# Creating objects and passing values
set_obj = SET("CSE")
scm_obj = SCM("BCom")

set_obj.display()
scm_obj.display()
```

Matplotlib is a powerful library in Python used for data visualization like line plots, bar graphs, histograms, etc.

Example Code:

python Copy Edit

```python
import matplotlib.pyplot as plt

x = [1, 2, 3, 4, 5]
y = [2, 4, 1, 8, 6]

plt.plot(x, y)
plt.title("Simple Line Plot")
plt.xlabel("X-axis")
plt.ylabel("Y-axis")
plt.show()
```


C: > Users > mansi > AppData > Local > Microsoft > Windows > INetCache > IE > XIV
1 newlist = [x**2 for x in range(1, 11) if x**2 <= 10]
2 sum_of_squares = sum(newlist)
3 print(newlist)
4 print(sum_of_squares)