practice questions by Chatgpt

```python
x = 10 #Create a variable x = 10 and print its type.

type(x)

int

S = "Python" #take a string s = "python" → print the first and last character.

S[0:6:5]

'Pn'

S1 = "Srushti" #Slice the string "Srushti" to print "hti".

S1[4:7]

'hti'

num = [1,2,3] #Create a list: nums = [1,2,3] and add the number 4 to the list.

num.append(4)

print(num)

[1, 2, 3, 4]

num1 = [5,2,5,8,5] #Count how many times 5 appears in this list: [5, 2, 5, 8, 5].

num1.count(5)

3

a=[10,20,30] #Make a copy of a list a = [10,20,30] into variable b

b=[]

b=a.copy()

print(a)
print(b)

[10, 20, 30]
[10, 20, 30]

x = "123"#Convert the string "123" into an integer and add 10 to it
y = int(x)
x1 = y + 10
```

```python
print (x1)
```

133

```python
S2 = "GenerativeAI" #Print the length of the string "GenerativeAI"

len(S2)
```

12

```python
Name = "Srushti"#Create variables: name, age, city, and print them in
one line using f-string
Age = 29
City = 'Florida'
print(f'Hi i am {Name} i am {Age} old and i live in {City} thank
you' )
```

Hi i am Srushti i am 29 old and i live in Florida thank you

```python
Name1 = 'Maggie' #Create variables: name, age, city, and print them in
one line using f-string
Age1 = 26
City1 = 'Hyderabad'
print(f'Hi my sister is {Name1} is he currently {Age1} old and she
lives in {City1}')
```

Hi my sister is Maggie is he currently 26 old and she lives in
Hyderabad

```python
Text = 'agentic-ai'#Given text = "agentic-ai" slice "agentic" only.

Text[0:7]
```

'agentic'

```python
text1 = 'learning'#Reverse a string "learning" using slicing

text1[::-1]
```

'gninrael'

```python
L  = [1,2,3]#Create a list a = [1,2,3] → append 7, append "hello",
then print the list.

L.append(7)
L.append('Hello')
print(L)
```

[1, 2, 3, 7, 'Hello']

```python
L1 = [1,2,2,3,3,3]#Let L1 = [1,2,2,3,3,3] → print how many times each
unique element occurs.
```

```python
L1.count(1)

1

L1.count(2)

2

L1.count(3)

3

i = 45.9 #Convert "45.9" into a float → add 10 → print result.
j = int(i) + 10
print (j)

55

S3 = 'SrushtiK'#From string "SrushtiK" print only even index
characters.

S3[0:8:2]

'Suhi'

S1 = 'Srushti'#From string "Srushti" print every 3rd character.

S1[0:7:3]

'Ssi'

l2 = ['a','b','c']#For list data = ['a','b','c'] → copy it → append
'd' to copy → show original list remains unchanged
l3 = []

l3=l2.copy()

l3.append('d')

print(l2)
print(l3)

['a', 'b', 'c']
['a', 'b', 'c', 'd']

l4 = [10,20,30,40,50]#check length of list [10,20,30,40,50]

len(l4)

5

a1 = [10,20,30,40,50,60]#a = [10,20,30,40,50,60] → print elements from
index 1 to 4
```

```
a1[1:4]

[20, 30, 40]

S5 = '10'#Take input as "10" (string) → convert to integer → double it
→ convert back to string
S6 = int(S5)
S7 = S6 * 2
S8 = str(S7)
print(S8)

20

S1 = 'Srushti'#name = "Srushti" → slice to print "rst".

S1[1:8:2]

'rst'

l4 = [1,2,3,4,5] #Rotate a list: [1,2,3,4,5] to [5,4,3,2,1] using
slicing.

l4[::-1]

[5, 4, 3, 2, 1]

marks = [90, 85, 90, 95, 90]#Given marks = [90, 85, 90, 95, 90] →
count how many times all value appears using count()

marks.count(90)

3

marks.count(85)

1

marks.count(95)

1
```

Mock test 1 by chatgpt

```
#SECTION A — Strings & Slicing (5 questions)

S = 'Srushti'#S = "Srushti" → slice and print "rus"

S[1:4]

'rus'

P = 'PythonCourse'#Slice "PythonCourse" to print "honC"
```

```python
P[3:7]
```

```
'honC'
```

```python
d = 'developer'#From "developer" print "velo"
```

```python
d[2:6]
```

```
'velo'
```

```python
l = 'learning'#From "learning" print the last 3 letters using slicing.
```

```python
l[5:8]
```

```
'ing'
```

```python
b = 'banana'#From "banana" print "nan" using slicing.
```

```python
b[2:5]
```

```
'nan'
```

```python
#SECTION B — Typecasting & Operators (5 questions)
```

```python
i = '200'#Convert "200" into an integer and divide it by 3 using floor
division.
y = int(i)
res = int.__floordiv__(y,3)
print(res)
```

```
66
```

```python
i1 = '12.5'#Convert "12.5" into a float and multiply it by 4
y1 = float(i1)
res1 = float.__mul__(y1,4)
print(res1)
```

```
50.0
```

```python
i2 = 50 #Convert 50 to a string and add "kg" to the end
y2 = str(i2)
res2 = str.__add__(y2,'kg')
print(res2)
```

```
50kg
```

```python
a = 5#Find the result of 5 ** 3
b = 3
int.__pow__(a,b)
```

```
125
```

```python
a1 = 7 #Using true division, divide 7 by 2 and print the result.
b1 = 2
int.__truediv__(a1,b1)
```

```
3.5
```

```python
#SECTION C – Lists & Methods (7 questions)
```

```python
l = [10,20,30] #Create a list [10, 20, 30] and append the value 40.

l.append(40)
print(l)
```

```
[10, 20, 30, 40]
```

```python
l1=[1,2,3] #Make a copy of the list [1, 2, 3] into a new variable

l2=l1.copy()
print(l2)
```

```
[1, 2, 3]
```

```python
l3 = [10, 20, 30, 40]#Find the index of value 30 in the list [10, 20,
30, 40]

l3.index(30)
```

```
2
```

```python
l4 = [5,6,7,8]#Delete the element at index 2 from the list [5, 6, 7,
8]
del l4[2]
print(l4)
```

```
[5, 6, 8]
```

```python
l5 = [100, 200, 300] #Clear the list [100, 200, 300]

l5.clear()
print(l5)
```

```
[]
```

```python
a1 = [1,2,3]#Given a = [1, 2, 3], store a copy in another list and
append "hello" only to the copy.
a2 = a1.copy()
a2.append('hello')
print(a1)
print(a2)
```

```
[1, 2, 3]
[1, 2, 3, 'hello']
```

```python
a3 = [10,20,30,40,50]#Slice the list [10,20,30,40,50] to get
[20,30,40]

a3[1:4]

[20, 30, 40]

lst = [1,2,3,4,5]#Rotate the list [1,2,3,4,5] to [5,1,2,3,4] using
slicing.
r = lst[-1:] + lst[:-1]
print(r)

[5, 1, 2, 3, 4]

s = '15'#Take input "15" (string), convert to integer, subtract 3,
convert back to string.
s1 = int(s)
s2 = int.__sub__(s1,3)
print(str(s2))

12

s3 = 'Srushtik'#"SrushtiK" → slice to print "sti"
s4 = s3[3] + s3[5] + s3[6]
print(s4) #slicing method is not possible here

sti
```

Mini mock test 2

```python
#Section A: Print, Typecasting & String Formatting (7 questions)

Name = 'Srushti'#Print your name and age in one line using format
print().
age = 29
print('Hi i am {} and i am {} old'.format(Name,age) )

Hi i am Srushti and i am 29 old

s = '50'#Convert "50" (string) to integer and subtract 20. Print
result.
s1 = int(s)
s2 = int.__sub__(s1,20)
print(str(s2))

30

f = "12.5"#Convert "12.5" (string) to float and multiply by 2. Print
"Result: X" where X is the value.
f1 = float(f)
x = float.__mul__(f1,2)
print(x)
```

```
25.0
```

```python
S = '100'#Take string "100" → convert to int → divide by 3 using floor
division → print result.
S1 = int(S)
res = int.__floordiv__(S1,3)
print(res)
```

```
33
```

```python
i = 45 #Convert integer 45 to string and concatenate it with " is the
number".
i1 = str(i)
print(i1  + ' is the number ')
```

```
45 is the number
```

```python
name = 'Srushti'#Use f-string to print "My name is Srushti and I am 20
years old" (replace with variables).
age = 20
print(f' my name is {name} and i am {age} years old')
```

```
 my name is Srushti and i am 20 years old
```

```python
a = 10 #Use format() method to print "The sum of 10 and 20 is 30"
dynamically using variables.
b = 20
c = a + b
print('the sum of {} and {} is {}'.format(a,b,c))
```

```
the sum of 10 and 20 is 30
```

```python
#Section B: Lists (7 questions)
```

```python
l = [10, 20, 30] #Create a list [10, 20, 30] → append 40 → print list.
l.append(40)
print(l)
```

```
[10, 20, 30, 40]
```

```python
l1 = [1,2,3] #Copy list [1, 2, 3] to another list → append 4 to copy →
print both lists.
l2 = l1.copy()
l2.append(4)
print(l1)
print(l2)
```

```
[1, 2, 3]
[1, 2, 3, 4]
```

```
k = [5, 6, 7, 8] #Delete the element at index 1 from [5, 6, 7, 8].
del k[1]
print(k)

[5, 7, 8]

i = [10, 20, 30, 40] #Find the index of 30 in [10, 20, 30, 40].
i.index(30)

2

i1 = [1,2,3,4]#Clear all elements of the list [1, 2, 3, 4].
print(i1)

[1, 2, 3, 4]

i1.clear()
print (i1)

[]

i = [1,2,3,4,5] #Rotate [1, 2, 3, 4, 5] to [5, 1, 2, 3, 4] using
slicing.
i1 = i[-1:] + i[:-1]
print(i1)

[5, 1, 2, 3, 4]

t = [1,2,2,3,2]#count how many times 2 appears in [1, 2, 2, 3, 2]
using a method you've learned.
t.count(2)

3

#Section C: Slicing (4 questions)

N = 'Srushti'#Slice "Srushti" to print "rus".
N[1:4]

'rus'

p = "PythonProgramming" #Slice "PythonProgramming" to print "gram".
p[9:13]

'gram'

l = 'learning'#Reverse the string "learning" using slicing.
l[::-1]

'gninrael'

S = 'Srushtik'#"SrushtiK" → pick letters "sti" using indexing and
concatenation (slicing won't work here).
```

```python
S1 = S[3] + S[5] + S[6]
print(S1)
```

sti

```python
a= 5#Calculate 5 + 3 * 2 and print the result.
b = 3
c = 2
d = a + b * c
print (d)
```

11

```python
a1 = 2 #Calculate 2 ** 5 and print the result.
b1 = 5
res = int.__pow__(a1,b1)
print(res)
```

32

```python
a2 = 17#Divide 17 by 4 using true division  and floor division .
b2 = 4
res1 = int.__truediv__(a2,b2)
res2 = int.__floordiv__(a2,b2)
print(res1)
print(res2)
```

4.25
4

```python
a3 = 12.5 #Multiply 12.5 by 4 using the method float.__mul__().
res3 = float.__mul__(a3,4)
print(res3)
```

50.0