In [2]:
```
#1.write a programming to Reverse a list without using the reverse() method (use slicing or a loop).
li=[1,2,3,4,5,6,7,8]
li[::-1]
```

Out[2]: [8, 7, 6, 5, 4, 3, 2, 1]

In [5]:
```
#2.Remove all occurrences of a specific element from a list.
li=[1,2,3,4,2,2,5,6,2,6]
remove_ele=2
while remove_ele in li:
    li.remove(remove_ele)
print(li)
```

```
[1, 3, 4, 5, 6, 6]
```

In [12]:
```
#3.write a program to Find the second largest number in a list.

data=[21,43,12,75,83,73,80]
if len(data) < 2:
    print("List contain more than 2 number")
elif data[0] > data[1]:
    largest = data[0]
    sec_lar = data[1]
else:
    largest = data[1]
    sec_lar = data[0]
for num in data[2:]:
    if num > largest:
         sec_lar = largest
         largest = num
    elif num > sec_lar and num != largest:
        sec_lar = num
print("second largest no:",sec_lar)
```

```
second largest no: 80
```

In [15]:
```
#4. Use list comprehension to create a list of all even numbers between 1 and 20 (inclusive)
num=["even" if i%2==0 else "odd" for i in range(1,20)]
print(num)
```

```
['odd', 'even', 'odd', 'even', 'odd', 'even', 'odd', 'even', 'odd', 'even', 'odd', 'even', 'odd', 'even', 'odd', 'even', 'odd',
'even', 'odd']
```

In [18]:
```
#5. Given a list of numbers, use list comprehension to create a new list containing only the numbers greater than 5.

li=[2,3,4,5,6,15,20,13]
label=[i for i in li if i>5]
print(label)
```

```
[6, 15, 20, 13]
```

In [21]:
```
#6. Given a list, remove a specific range of elements (defined by start and end indices) using the del keyword and slicing.
fruits=["Cherry","Apple","Banana","Orange","Mango","Berries"]
print(len(fruits))
del fruits[2:5]
print(fruits)
```

```
6
['Cherry', 'Apple', 'Berries']
```

In [22]:
```
#7. Given a list of words, use list comprehension to create a new list containing the length of each word.
fruits=["Cherry","Apple","Banana","Orange","Mango","Berries"]
res=[len(frt) for frt in fruits]
print(res)
```

```
[6, 5, 6, 6, 5, 7]
```

In [ ]:
```
#8. Write a function that takes a list and a value as input and removes all occurrences of that value from the list in-place.
li=input("Enter a list")
val=input("Enter a value")
print(li)
li2=li.split()
print(li2)
while val in li2:
    li2.remove(val)
print(li2)
```

In [25]:
```
#9. Write a program that takes a string as input, converts it into a list of characters, reverses the list,
#and then joins the characters back into a   reversed string. Print the reversed string.

s=input("Enter a string")
print(s)
```

```
li=list(s)
li.reverse()
print(li)
string=str(li)
print(string)
```

```
abcdef
['f', 'e', 'd', 'c', 'b', 'a']
['f', 'e', 'd', 'c', 'b', 'a']
```

In [31]:
```
#10. Write a program that takes a sentence as input. Split the sentence into a list of words. Then, iterate through the list o
#the total number of vowels (a, e, i, o, u - case-insensitive) in all the words combined. Print the total vowel count.

sentence="This is a python program"
print(sentence)
li=sentence.split()
total_vowel=0
vowels="aeiouAEIOU"
print(li)
for s in li:
    for char in s:
        if char in vowels:
            total_vowel+=1
print("Total Vowels:",total_vowel)
```

```
This is a python program
['This', 'is', 'a', 'python', 'program']
Total Vowels: 6
```

In [ ]:
```

```