```python
def sort(nums):
    odd=[]
    even=[]
    res=[]
    for num in nums:
        if num%2==0:
            even.append(num)
        else:
            odd.append(num)
    for i in range(len(nums)):
        if i%2==0:
            res.append(even.pop())
        else:
            res.append(odd.pop())
    return res
nums=[1,2,6,7]
sorted_num= sort(nums)
print(sorted_num)
```

IDLE Shell 3.12.2

File Edit Shell Debug Options Window Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/odd and even i
n a list.py
[6, 7, 2, 1]
>>>
```

File   Edit   Format   Run   Options   Window   Help

```python
s=input("ENTER ROMAN NUMBER: ")

res=0

rom={'I':1,'V':5,'X':10,'L':50,'C':100,'D':500,'M':1000}

for i in range(len(s)):
    if i+1<len(s) and rom[s[i]]<rom[s[i+1]]:
        res-=rom[s[i]]
    else:
        res+=rom[s[i]]

print("THE ROMAN NUMBER IS : ",s)

print("THE INTEGER NUMBER IS : ",res)
```

IDLE Shell 3.12.2

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/rom to int.py
27
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/rom to int.py
ENTER ROMAN NUMBER: XXVII
THE ROMAN NUMBER IS :  XXVII
THE INTEGER NUMBER IS :  27
>>>
```

Ln: 11 Col: 0

Ln: 13 Col: 32

```python
def fib(n):
    if(n==0 or n==1):
        return n
    else:
        return (fib(n-1)+fib(n-2))
n=int(input("ENTER NUMBER OF TERMS: "))
for i in range(0,n):
    print(fib(i))
```

```
ENTER NUMBER OF TERMS: 10
0
1
1
2
3
5
8
13
21
34


=== Code Execution Successful ===
```

programiz.com/python-programming/online-compiler/#google_vignette

Programiz
Python Online Compiler

Programiz PRO >

main.py   Clear   Save   Run

```python
1  n=-123
2  if (n>0):
3      b=str(n)
4      c=b[::-1]
5      a=int(c)
6      print(a)
7  else:
8      n1=n*-1
9      b=str(n1)
10     c=b[::-1]
11     a=int(c)
12     a=a*-1
13     print(a)
14
15
```

Output   Clear

```
-321

=== Code Execution Successful ===
```

File Edit Format Run Options Window Help

```python
height=[1,8,6,2,5,4,8,3,7]

res=0

l=0
r=len(height)-1

while(l<r):
    area=(r-l)*min(height[l],height[r])
    res=max(res,area)
    if height[l]<= height[r]:
        l+=1
    else:
        r-=1

print("THE MAXIMUM AMOUNT OF WATER THAT A CONTAINER CAN STORE IS: ",res)
```

IDLE Shell 3.12.2

File Edit Shell Debug Options Window Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/water tank.py
THE MAXIMUM AMOUNT OF WATER THAT A CONTAINER CAN STORE IS:  49
>>>
```

File Edit Format Run Options Window Help

```python
def rev(n,r):
    if(n==0):
        return r
    else:
        return rev(n//10,r*10+n%10)

num=int(input("ENTER A NUMBER: "))
reverse=rev(num,0)
print("REVERSE NUMBER: ",reverse)
```

IDLE Shell 3.12.2

File Edit Shell Debug Options Window Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/reverse a numb
er using recursion.py
ENTER A NUMBER: 643
REVERSE NUMBER:  346
>>>
```
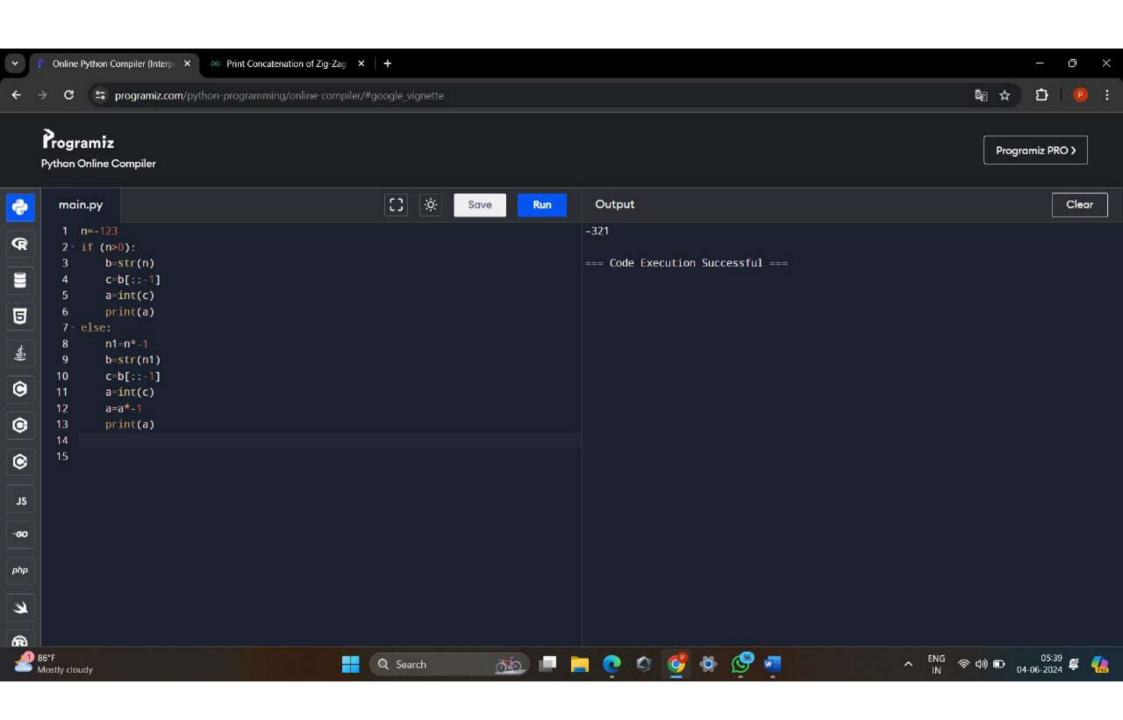
Ln: 7 Col: 0

Ln: 5 Col: 30

```python
def partition(array, low, high):
    pivot = array[high]
    i = low - 1
    for j in range(low, high):
        if array[j] <= pivot:
            i = i + 1
            (array[i], array[j]) = (array[j], array[i])
    (array[i + 1], array[high]) = (array[high], array[i + 1])
    return i + 1


def quickSort(array, low, high):
    if low < high:
        pi = partition(array, low, high)
        quickSort(array, low, pi - 1)
        quickSort(array, pi + 1, high)


data = [1, 7, 4, 1, 10, 9, -2]
print("Unsorted Array")
print(data)

size = len(data)

quickSort(data, 0, size - 1)

print('Sorted Array in Ascending Order:')
print(data)
```

IDLE Shell 3.12.2

File Edit Shell Debug Options Window Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/heap sort.py =
Unsorted Array
[1, 7, 4, 1, 10, 9, -2]
Sorted Array in Ascending Order:
[-2, 1, 1, 4, 7, 9, 10]
>>>
```

File   Edit   Format   Run   Options   Window   Help

```python
def pre(strs):
    res=''
    for i in range(len(strs[0])):
        for s in strs:
            if i==len(s) or s[i]!=strs[0][i]:
                return res
        res+=strs[0][i]
    return res

strs = ["flower","flow","flight"]

print(pre(strs))
```

IDLE Shell 3.12.2

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/prefix.py
fl
>>>
```

Ln: 6 Col: 0

Ln: 10 Col: 10

Programiz
Python Online Compiler

Programiz PRO >

main.py   Clear   Save   Run   Output   Clear

```python
1  str = "babad"
2  n = len(str)
3  Length = 1
4  start = 0
5  for i in range(n):
6      for j in range(i, n):
7          flag = 1
8          for k in range(0, ((j - i)) + 1):
9              if (str[i + k] != str[j - k]):
10                 flag = 0
11         if (flag != 0 and (j - i + 1) > Length):
12             start = i
13             Length = j - i + 1
14  print("Longest palindrome substring is: ", end="")
15  for i in range(start, start + Length):
16      print(str[i], end="")
17  |
18
```

Longest palindrome substring is: bab
=== Code Execution Successful ===

File   Edit   Format   Run   Options   Window   Help

```python
def rev(s):
    if len(s)==0:
        return s
    else:
        return rev(s[1:])+ s[0]
s="PRAJIITH"
print(rev(s))
```

IDLE Shell 3.12.2

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb  6 2024, 21:26:36) [MSC v.1937 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/praji/AppData/Local/Programs/Python/Python312/reversed strin
g.py
HTIIJARP
>>>
```

Ln: 6   Col: 0

Ln: 7   Col: 13

98°F
Partly sunny

Q Search

ENG
IN

13:51
04-06-2024