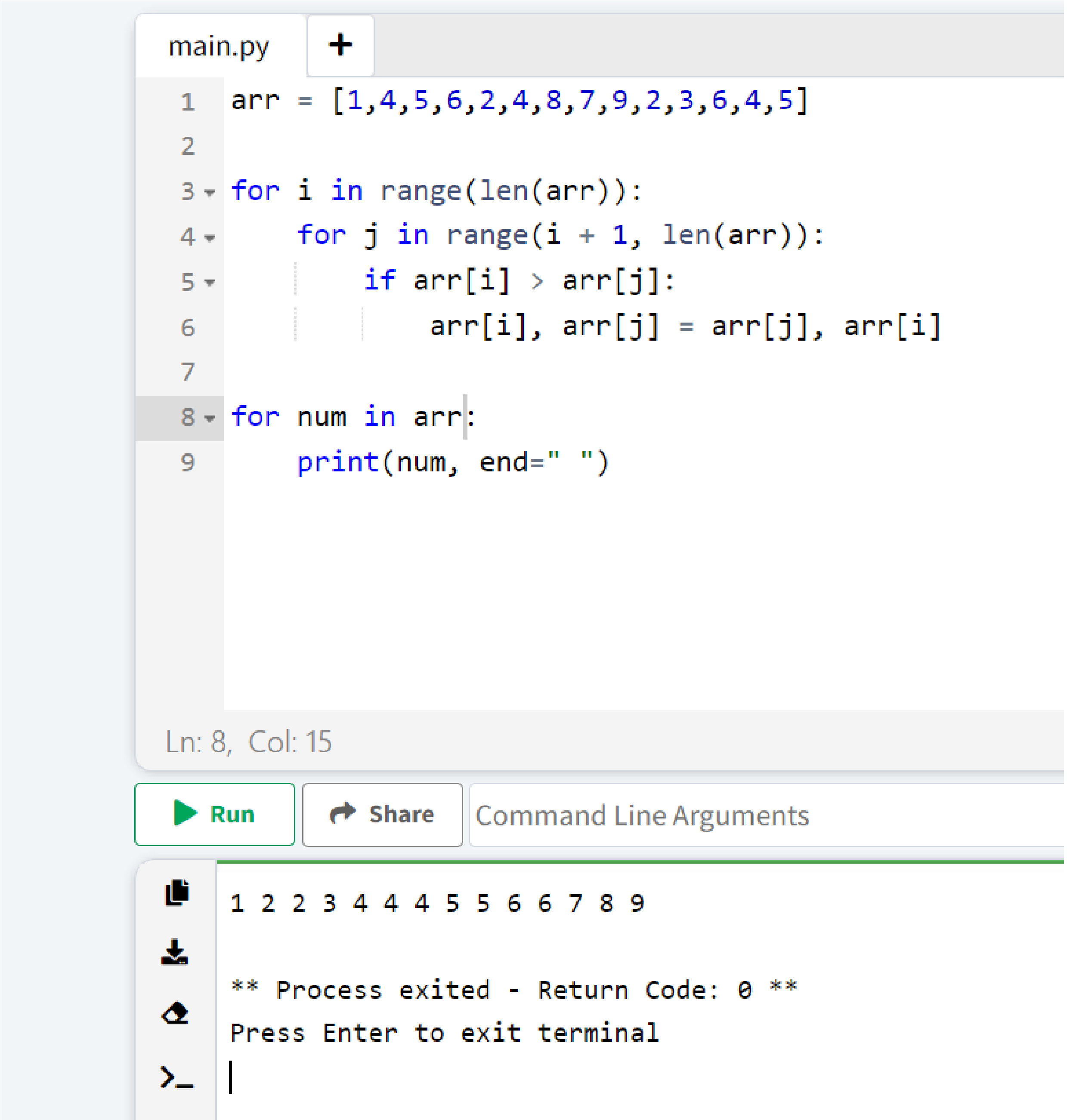
Problem Statement : Write a Program in Python to apply Bubble Sort Algorithm

Objective : To Write a Program in Python for Bubble Sort Algorithm

Source Code & Input-Output :



```python
arr = [1,4,5,6,2,4,8,7,9,2,3,6,4,5]

for i in range(len(arr)):
    for j in range(i + 1, len(arr)):
        if arr[i] > arr[j]:
            arr[i], arr[j] = arr[j], arr[i]

for num in arr:
    print(num, end=" ")
```

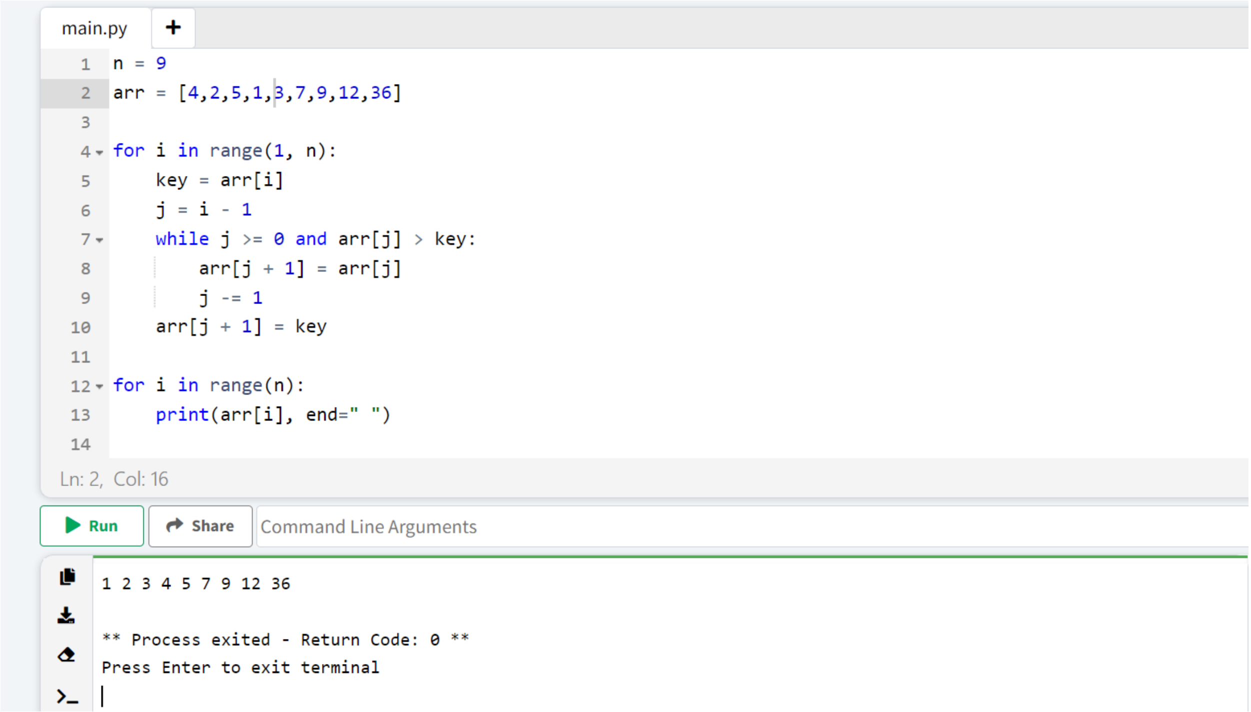
```
1 2 2 3 4 4 4 5 5 6 6 7 8 9 

** Process exited - Return Code: 0 **
Press Enter to exit terminal
```

Problem Statement : Write a Program in Python to apply Insertion Sort Algorithm

Objective : To Write a Program in Python for Insertion Sort Algorithm

Source Code & Input-Output :



```python
n = 9
arr = [4,2,5,1,3,7,9,12,36]

for i in range(1, n):
    key = arr[i]
    j = i - 1
    while j >= 0 and arr[j] > key:
        arr[j + 1] = arr[j]
        j -= 1
    arr[j + 1] = key

for i in range(n):
    print(arr[i], end=" ")

```

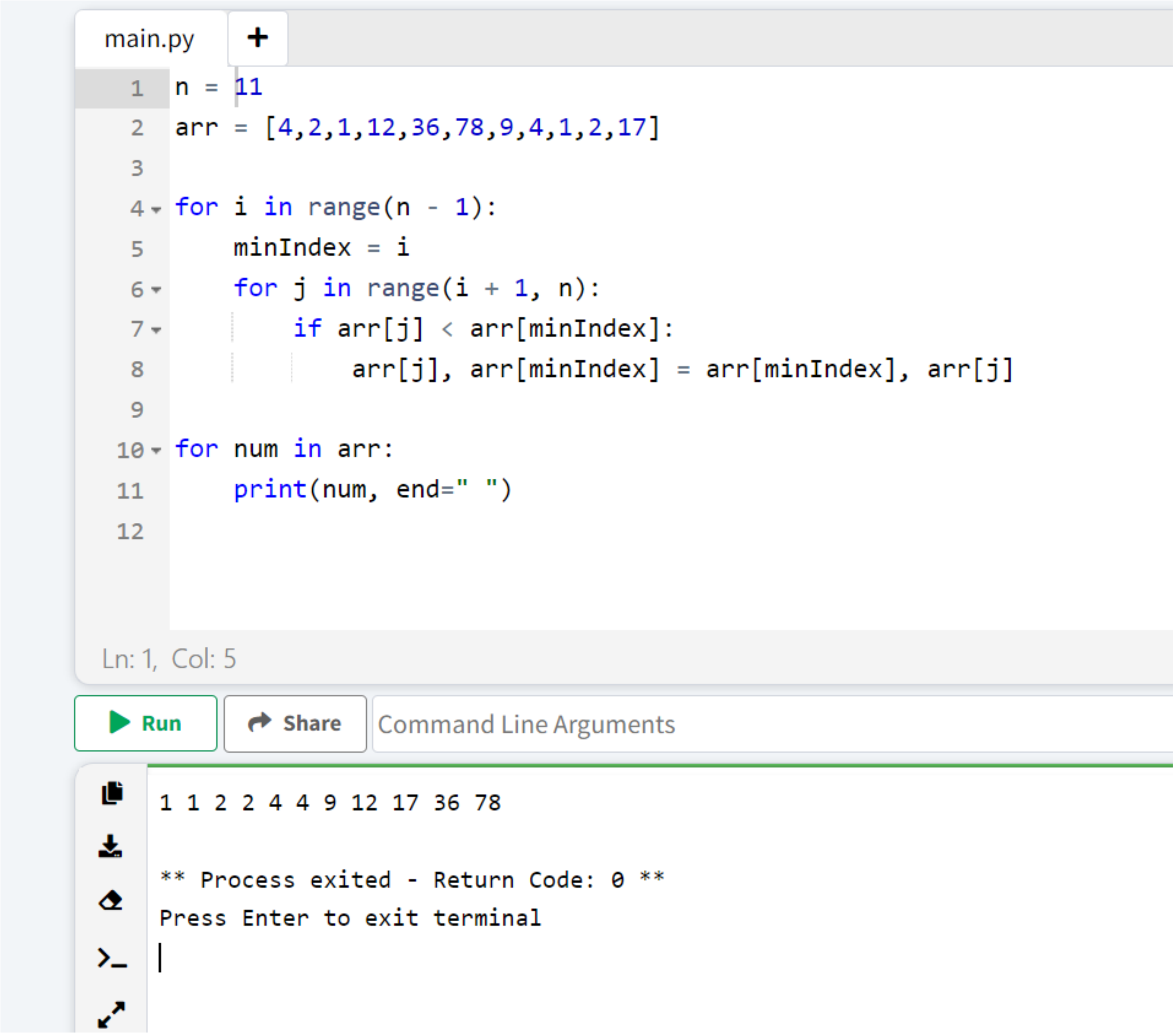
```
1 2 3 4 5 7 9 12 36

** Process exited - Return Code: 0 **
Press Enter to exit terminal
```

Problem Statement : Write a Program in Python to apply Selection Sort Algorithm

Objective : To Write a Program in Python for Selection Sort Algorithm

Source Code & Input-Output :



```python
n = 11
arr = [4,2,1,12,36,78,9,4,1,2,17]

for i in range(n - 1):
    minIndex = i
    for j in range(i + 1, n):
        if arr[j] < arr[minIndex]:
            arr[j], arr[minIndex] = arr[minIndex], arr[j]

for num in arr:
    print(num, end=" ")

```

```
1 1 2 2 4 4 9 12 17 36 78

** Process exited - Return Code: 0 **
Press Enter to exit terminal
```