## **Problem – 3: Next permutation array**

```
def next_permutation(arr):
  n = len(arr)
  i = n - 2
  while i \ge 0 and arr[i] \ge arr[i+1]:
     i -= 1
  if i \ge 0:
    j = n - 1
     while arr[j] <= arr[i]:
       j -= 1
     arr[i], arr[j] = arr[j], arr[i]
  left = i + 1
  right = n - 1
  while left < right:
     arr[left], arr[right] = arr[right], arr[left]
     left += 1
     right = 1
  return arr
arr = [1, 3, 2]
next_permuted_arr = next_permutation(arr)
print(next permuted arr)
arr = [3, 2, 1]
next_permuted_arr = next_permutation(arr)
print(next_permuted_arr)
```

```
arr = [3, 2, 1]
next_permuted_arr = next_permutation(arr)
print(next_permuted_arr)

input
[2, 1, 3]
[1, 2, 3]

...Program finished with exit code 0

Press ENTER to exit console.
```