# Code:

```python
import random


def partition(array, low, high, piv):
    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:
        if randomized:
            piv = random.randrange(low, high)
        else:
            piv = high
        pi = partition(array, low, high, piv)
        quickSort(array, low, pi - 1)
        quickSort(array, pi + 1, high)


randomized = bool(int(input("Enter 0 for fixed, 1 for randomized pivot : ")))
data = [1,8,6,7,4,2,5]
print("Unsorted Array")
print(data)
size = len(data)
randomized = True
quickSort(data, 0, size - 1)
print("Sorted Array in Ascending Order:")
print(data)
```

# Output:

```
Windows PowerShell
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PS E:\BE\41427_LP-III_Codes\DAA> & C:/Users/abhij/AppData/Local/Programs/Python/Python
38/python.exe e:/BE/41427_LP-III_Codes/DAA/41427_LP-III_A5.py
Enter 0 for fixed, 1 for randomized pivot : 0
Unsorted Array
[1, 8, 6, 7, 4, 2, 5]
Sorted Array in Ascending Order:
[1, 2, 4, 5, 6, 7, 8]
PS E:\BE\41427_LP-III_Codes\DAA> & C:/Users/abhij/AppData/Local/Programs/Python/Python
38/python.exe e:/BE/41427_LP-III_Codes/DAA/41427_LP-III_A5.py
Enter 0 for fixed, 1 for randomized pivot : 1
Unsorted Array
[1, 8, 6, 7, 4, 2, 5]
Sorted Array in Ascending Order:
[1, 2, 4, 5, 6, 7, 8]
PS E:\BE\41427_LP-III_Codes\DAA>
```