

## Hands On\_5 – Min Heap

### Working example – INT

```
Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 1
Enter space-separated elements to initialize custom heap: 7 3 2 9 5 4 1 5
```

```
Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 4
Custom Heap: ['1', '3', '2', '5', '5', '4', '7', '9']
```

```
Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 3
Extracted minimum custom element: 1
```

```
Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
```

## Working Example – FLOAT

Choose an option:

1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit

Enter your choice: 1

Enter space-separated elements to initialize custom heap: 4.2 7.6 1.3 9.9 5.8 6.3

Choose an option:

1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit

Enter your choice: 2

Enter element to insert into custom heap: 11.3

Choose an option:

1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit

Enter your choice: 4

Custom Heap: ['1.3', '5.8', '11.3', '9.9', '7.6', '6.3', '4.2']

Choose an option:

1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit

Enter your choice:

## Working Example – Custom datatype/String

```
Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 1
Enter space-separated elements to initialize custom heap: g s w a z c r e

Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 3
Extracted minimum custom element: a

Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 4
Custom Heap: ['c', 'e', 'r', 'g', 'z', 'w', 's']

Choose an option:
1. Initialize custom heap
2. Insert custom element
3. Extract minimum custom element
4. Display custom heap
5. Exit
Enter your choice: 5
```