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SUBJECT: DATA STRUCTURE AND ALGORITHM

COURSE & YEAR: BSIS – 2A

PROFESSOR: MS. KHRISTINE BOTIN

Activity Title: Treasure Hunter's Heap Challenge

1. Outputs welcome message and choosing an action which is add a value or a treasure

Compile Result

```
Welcome to the Treasure Hunter's Heap Game!
Choose an action:
1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 1
Enter the treasure value: 20

Adding treasure with value 20...
Current Max-Heap: 20
Current Min-Heap: 20
```

2. Outputs another inputting values or treasures

```
Choose an action:
1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 1
Enter the treasure value: 19

Adding treasure with value 19...
Current Max-Heap: 20 19
Current Min-Heap: 19 20
```

```
Choose an action:
1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 1
Enter the treasure value: 40

Adding treasure with value 40...
Current Max-Heap: 40 19 20
Current Min-Heap: 19 20 40
```



Choose an action:

1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 1
Enter the treasure value: 200

Adding treasure with value 200...
Current Max-Heap: 200 40 20 19
Current Min-Heap: 19 20 40 200

3. Displays the most valuable treasure

Choose an action:

1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 2
The most valuable treasure is: 200

4. Displays the least valuable treasure

Choose an action:

1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

Enter your choice: 3
The least valuable treasure is: 19



5. Displays an invalid choice of the actions

```
Choose an action:
```

1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

```
Enter your choice: 5  
Invalid choice. Please try again.
```

6. Choosing the action for exit and displays thank you message

```
Choose an action:
```

1. Add a treasure
2. Show the most valuable treasure (Max-Heap)
3. Show the least valuable treasure (Min-Heap)
4. Exit

```
Enter your choice: 4  
Thanks for playing the Treasure Hunter's Heap Game! Goodbye!
```

```
[Process completed - press Enter]
```