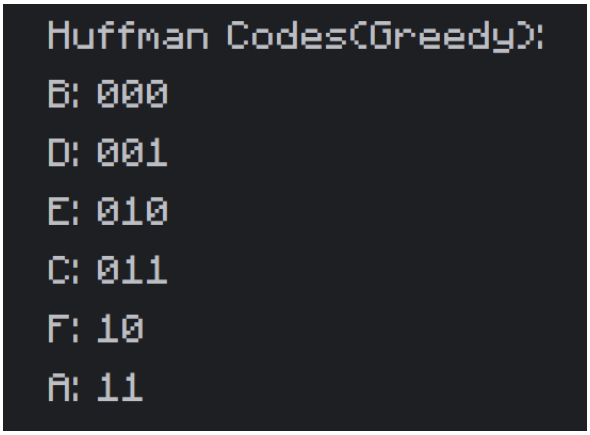
Group 10 Assignment 3 PDF

Group work distribution

Zach – Programmed the Huffman Encoding program
Gabriel – Programmed the max heap function
Lisan – Programmed the min heap function
Mathew – Created PDF
David – Gave integer input for Heap Tree program

Screenshots

Huffman Encoding:



Heap Tree:

```
Enter 7 integers (press Enter after each one):
4
6
10
13
5
3
1
Select Heap Type:
1. Max Heap
2. Min Heap
1
Fig A (Max Heap)
Extracted Max: 13
Extracted Max: 10
Extracted Max: 6
Extracted Max: 5
Extracted Max: 4
Extracted Max: 3
Extracted Max: 1
```

```
Enter 7 integers (press Enter after each one):
5
10
13
4
1
3
6
Select Heap Type:
1. Max Heap
2. Min Heap
2
Fig B (Min Heap)
Extracted Min: 1
Extracted Min: 3
Extracted Min: 4
Extracted Min: 5
Extracted Min: 6
Extracted Min: 10
Extracted Min: 13
```

Huffman Encoding Table

Approach (Greedy)			
Char	Freq	Code	Total
A	6	11	12
B	2	000	6
C	2	011	6
D	2	001	6
E	2	010	6
F	5	10	10
Total Bits to transmit:			46