

## ICS211 - Algorithms - Lab Assignment 1

Due date: Nov 23rd, Time 10 pm

Given a list of numbers in a file, where each element in the file denotes the frequency of an element. Find the huffman code for all the elements and print them in a file.

**Format:** The format of the input file and output file is given below.

### Inputfile.txt

1 1 2 3 5 8 13 21

### Outputfile.txt

0000000 0000001 000001 00001 0001 001 01 1

**Way to execute:**

a.out Inputfile.txt Outputfile.txt

**Way to submit:**

Create a folder with your roll number and keep a single file, say, huffman.c in the folder. Create a tar.gz file and mail to *sahal.k13@iits.in*.

**Note:** Copying code from your friends or from internet will fetch you negative marks.

**Bonus Question:** Do complete file encoding and file decoding. Deadlines for the bonus question and the original question are same. The students who solve bonus question, need to mail their complete programs in a tar.gz to *Sahal* before the deadline. These students will be called further for manual evaluation. Deadline will not be extended.