Report

Project 2

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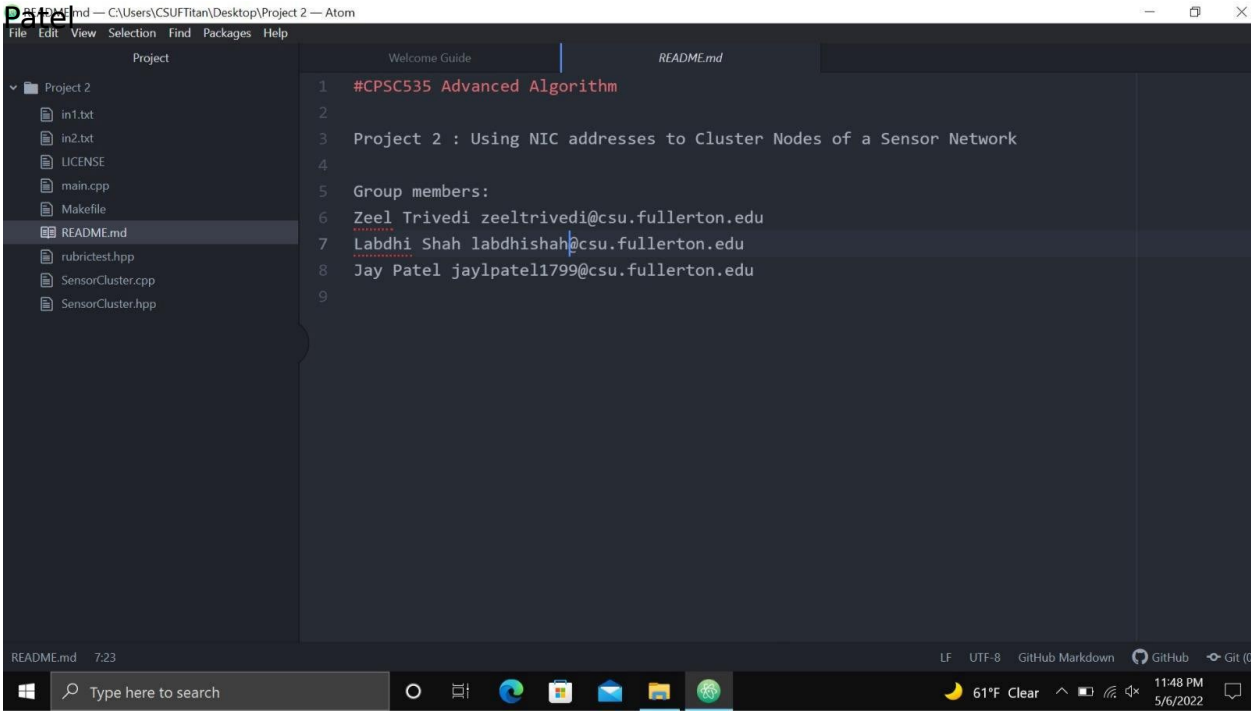

Pseudocode description:

There are total 6 hash tables in given program.

Pseudocode for the given problems:

##the given has value is of six digit

##so to compute it the first digit of the address, the

module logic is used to compute first digit,

(address1/100000 % 10) to compute second digit,

(address2/10000%10)

to compute third digit, (address3/1000%10)

to compute fourth digit,(address4/100%10)

to compute fifth digit,(address5/10%10)

to compute sixth digit,(address6/1%10)

##now after returning the hash value based on

the each digit, ##copying the text, from one file

to other file.

##now function to add the NIC to the given sensor network file for example, using the hash table,

hashTable1.insert({nic1, item1})

hashTable2.insert({nic2, item2})

hashTable3.insert({nic3, item3})

hashTable4.insert({nic4, item4})

hashTable5.insert({nic5, item5})

hashTable6.insert({nic6, item6})

#now using delete function to remove the NIC value from network, if the function finds the NIC in file, then it deletes the value; else it will return the false and close the file.

hashTable1.erase(nic)

hashTable2.erase(nic)

hashTable3.erase(nic)

hashTable4.erase(nic)

hashTable5.erase(nic)

```
hashTable6.erase(nic)
```

##function will decide the best hash function from the six hasing table and the most balanced sensor network for the current set of NIC address to find the maximum and minimum value from each hashtable turn by turn

```
unsigned int minimum_val = hashTable1.bucket_size(0);

unsigned int maximum_val = hashTable1.bucket_size(0);

 for (auto i = 1; i < 10; ++i){

   unsigned int bucket = hashTable1.bucket_size(i);

   if (bucket < minimum_val){

    min = bucket;

   } else if (bucket > maximum_val){

    max = bucket;
```

##now to find the best, best_value = maximum_value - minimum_value

Result: