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Wednesday

Lab-8.

Hashing
Implementing
Dictionary

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```
const int TS=300;
class HashTable
{ public:
        int k;
        int v;
        HashTable(int k, int v)
        { this -> k=k;
          this -> v=v;
        }
};
class Hashmap
{ private:
        HashTable t;
        pubic:
          Hashmap()
          { t = new HashTable [TS];
            for(int i=0; i<TS; i++)
            { t[i]= NULL;
            }
          }
int HashFunc(int k) { return k%TS; }
void insert(int k, int v)
{ int ha= HashFunc(k);
while (t[ha] != NULL && t[ha] -> k != k)
{ ha = HashFunc(ha+1);
}
if (t[ha] != NULL)
        delete t[ha]
        t[ha]= new HashTable (k,v);
}
```

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```
int searching(int k)
{
  int h= HashFunc(k);
  while(t[h]!= NULL && t[h]->k!= k)
  { h= HashFunc(h+1); }
  if (t[h]==NULL)
      return -1;
  else
    return t[h]->v;
  }
  void delete(int k)
  { int h= HashFunc(k);
    while (t[h]!=NULL)
    { if (t[h]->k==k)
        break;
        h= HashFunc(h+1);
    }
    if (t[h]==NULL)
    { cout<<" No of elements at key "<<k;
      return;
    }
    else delete t[h]; }
    cout<<" Element deleted ";
    }
```