SOWMYA. D.U.
1BM19CS408.

Date
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Program to implement functions of dictionary, using Hashing.

```
class Dictionary
{
public:
    int index;
    Dictionary();
    void insert(int);
    void search(int);
    void delete_ele(int);
};
Dictionary :: Dictionary()
{ index = -1;
  for(int i=0; i<max; i++)
  {
    ptr[i] = NULL;
    temp[i] = NULL;
  }
}
void Dictionary :: insert(int key)
{ index = int(key % max);
  (ptr[index]) = (node-type*) malloc(sizeof(node-type));
  ptr[index]->data = key;
  if(root[index] == NULL)
  {
    root[index] = ptr[index];
    root[index]->next = NULL;
    temp[index] = ptr[index];
  }
```

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```
else
{ temp[index] = root[index];
  while (temp[index]->next != NULL)
    temp[index] = temp[index]->next;
  temp[index]->next = ptr[index];
}
}
void Dictionary :: search (int key)
{ int flag = 0;
  index = int (key % max);
  temp[index] = root[index];
  while (temp[index] != NULL)
  { if (temp[index]->data == key)
    {
      cout<<"\n search key is found !!";
      flag = 1;
      break;
    }
    else
    temp[index] = temp[index]->next;
  }
  if (flag == 0)
  cout<<"\n search key not found ...--";
}

void Dictionary :: delete_ele (int key)
{ index = int (key % max);
  temp[index] = root[index];
  while (temp[index]->data != key &&
         temp[index] != NULL)
  { ptr[index] = temp[index];
    temp[index] = temp[index]->next;
  }
```

```
ptr[index]->next = temp[index] -> next;
cout << "\n" << temp[index] -> data << " has
        been deleted.";
temp[index] -> data = -1;
temp[index] = NULL;
free (temp[index]);
}
```