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[SPLASH]

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++)
     {
        root [i] = NULL;
        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],
      }
    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 << "Found";
            flag = 1;
            break;
        }
        else
            temp [index] = temp [index] -> next;
    }
    if (flag == 0)
        cout << "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 << temp [index] -> data << " has been deleted";
    temp [index] -> data = -1;
    temp [index] = NULL;
    free (temp [index]);
}.
```