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Hashing

Dictionary using the hashing

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 *) malloc (Size of (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 << "In Search key is found!!"

flag = 1;

break;

else

temp[index] = temp[index] → next;

}

if (flag == 0)

cout << "In 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 + 1; temp[ptr] = temp[index]

temp[index] = temp[index] → next;

ptr[index] → next = temp[index] → next;

cout << "In " << temp[index] → data << " deleted."

temp[index] → data = -1;

temp[index] = NULL;

free(temp[index]);