

Siddhartha

ADS - write-up

```
Dictionary()
```

```
{
```

```
→ i = -1, j = 0;
```

```
while (j < max)
```

```
{
```

```
root, ptr, temp = NULL;
```

```
j++;
```

```
}
```

```
}
```

```
insert(data)
```

```
{
```

```
i = data % max;
```

```
ptr[i] → val = data;
```

```
if (root[i] == NULL)
```

```
{
```

```
root[i] = temp[i] = ptr[i];
```

```
root[i] → next = NULL
```

```
}
```

```
else
```

```
// insert ptr[i] at the end of temp
```

```

while (temp → next != NULL)
    temp = temp → next;
temp → next = ptr[i]
}
}

```

```

delete(data)
{
    i = data % max;
    temp[i] = root[i];
    while (temp[i] → val != data and temp[i] != NULL)
    {
        *ptr = *temp;
        temp = temp → next;
    }
}

```

```

ptr[i] → next = temp[i] → next;
temp[i] → val = -1;
temp[i] = NULL;
free(temp[i]);
}

```

```

struct hash
{
    int val;
    struct hash * next;
}

```

```

typedef struct hash node;
node *temp[max], *root[max], *ptr[max];
int index i

```