

Q1 = Write a program of linear search for t test cases, which also prints the no. of comparisons made in each test case. Print "Key found" if found, print "key not found", if not found in the array.

→

Pseudo code:-

```
int i, j, n, t, comp, k, flag = 0;
```

```
l = 0; scanf ("%d", &t)
```

```
while (i != t)
```

```
{
```

```
scanf ("%d", &n);
```

```
int A[n];
```

```
for (j = 0; j < n; j++)
```

```
scanf ("%d", &A[j]);
```

```
scanf ("%d", &k);
```

```
comp = 0; flag = 0;
```

```
for (j = 0; j < n; j++)
```

```
{
```

```
comp ++;
```

```
if (k == A[j])
```

```
{
```

```
printf ("key found");
```



```
printf ("No. of comparisons = %d", comp);  
flag++;
```

```
break;
```

```
i++;
```

```
}
```

```
if (to flag == 0)
```

```
printf ("Rpy not found");
```

```
}
```