

Name

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## Assignment No. 2

QNo-1:-

:- Binary Search Java:-

```
Public class Binary Search
```

```
{
```

```
Public Static int rank (int key, int [])
```

Return Type

Parameter Type

Parameter Variable

```
{
```

```
int lo = 0;
```

initializing declaration

```
int hi = a.length - 1;
```

## Loop Statement:-

```
while (Lo <= Hi)
{
    int mid = Lo + (Hi - Lo) / 2;
    if (key < a[mid]) hi = mid - 1;
    else if (key > a[mid]) Lo = mid + 1;
    else
        return mid;
}
return -1;
}
```

```
Public Static void main (String[] args)
{
    int[] whitelist = In.readlns (args[0]);
}
```

Arrays.sort (whitelist); → call a method in Java library.

```
while (!StdIn.isEmpty())
{
```

```
    int key = StdIn.readInt();
    conditional (rank (key, whitelist) == -1)
    statement StdOut.println (key);
}
```

Hafiz