

```
def IntPolsearch(list, x):
    idx0 = 0
    idxn = (len(list) - 1)
    found = False
    while idx0 != idxn and x >= list[idx0] and x <= list[idxn]:
        mid = idx0 + int(((float(idxn - idx0) / (list[idxn] - list[idx0])) *
                        (x - list[idx0])))
        if list[mid] == x:
            found = True
            return found
        if list[mid] < x:
            idx0 = mid + 1
        else:
            idxn = mid - 1
    return found
```