11.3-4

Code

```
from math import floor, sqrt

m = 1000
A = (sqrt(5)-1)/2

def h(k):
    return int(floor(m * ((k*A) % 1)))

if __name__ == '__main__':
    for i in range(61, 66):
        print(h(i))
```

Output
700
318
936
554
172

11.4-2

```
def hash_delete(T, k):
    for i in range(m):
        slot = h(k, i)
        if T[slot] == k:
            T[slot] = DELETED
            return slot
        elif T[slot] == None:
            break
    raise KeyError('k not in T')
```

```
HASH-INSERT(T, k)
    i = 0
    repeat
        j = h(k, i)
        if T[j] == NIL or T[j] == DELETED
            T[j] = k
            return j
        else i = i+1
    until i == m
    error "hash table overflow"
```