

Programming Assignment

Implement the LH addressing assignment for a given level and a given split pointer.

```
def address(key, level, split):  
    """ Calculates the address of a record with hash of key  
        key for a given level and split pointer  
    """  
    ...
```

For level 7 and split pointer 22 insert 1,000 random records (represented by random 32-bit numbers) into an LH structure with $2^7 + 22 = 150$ buckets. Calculate the number of records per individual bucket. Display them with matplotlib.pyplot.

Repeat with 100,000 random records.

Hand-in: Your code as a .py file. The two figures in a single pdf file.