

```
def hash1(word):  
    return sum(ord(ch) for ch in word) % 10
```

```
def hash2(word):  
    return len(word) % 10
```

```
def hash3(word):  
    prod = 1  
    for ch in word:  
        prod *= ord(ch)  
    return prod % 10
```

```
bloom_filter = [0] * 10
```

```
def add_word(word):  
    index1 = hash1(word)  
    index2 = hash2(word)  
    index3 = hash3(word)  
    bloom_filter[index1] = 1  
    bloom_filter[index2] = 1  
    bloom_filter[index3] = 1
```

```
def check_word(word):  
    index1 = hash1(word)  
    index2 = hash2(word)  
    index3 = hash3(word)  
    if bloom_filter[index1] == 1 and bloom_filter[index2] == 1 and bloom_filter[index3] == 1:  
        return "Probably"  
    else:  
        return "NO"
```

```
add_word("books")  
add_word("novels")  
add_word("documents")
```

```
print(bloom_filter)
```

```
print(check_word("books"))  
print(check_word("newspapers"))  
print(check_word("documents"))  
print(check_word("reports"))
```