```
 1 import hashlib
 2
 3 ##for list of 10 names
 4
 5 names_list =['Noah', 'Liam', 'Benjamin', 'Oliver', '
   William', 'James', 'Joe', 'Lucas', 'Mason', 'Michael']
 6
 7 hashmap={}
 8
 9 for names in names_list:
10
11     results=hashlib.sha256(names.encode('utf-8')).
   hexdigest()
12
13     hashmap[names]=divmod(int(results,base=16), 10)
14
15 print(hashmap)
16
17 ## for list of 20 names
18
19 names_list2 =['Emily','Madison','Emma','Hannah','Olivia','
   Abigail','Isabella','Ashley','Samantha','Elizabeth','
   Alexis','Sarah','Alyssa','Grace','Sophia','Lauren','Ava','
   Jessica','Natalie','Anna']
20
21 hashmap2={}
22
23 for names2 in names_list2:
24
25     results2=hashlib.sha256(names2.encode('utf-8')).
   hexdigest()
26
27     hashmap2[names2]=divmod(int(results2,base=16), 20)
28
29 print(hashmap2)
30
31 ## for list of 50 names
32
33 names_list3 =['James','Mary','John','Patricia','Robert','
   Jennifer','Michael','Linda','William','Elizabeth','David',
   'Barbara','Richard','Susan','Joseph','Jessica','Thomas','
   Sarah','Charles','Margaret','Christopher','Karen','Daniel'
   ,'Nancy','Matthew','Lisa','Anthony','Betty','Donald','
   Dorothy','Mark','Sandra','Paul','Ashley','Steven','
   Kimberly','Andrew','Donna','Kenneth','Emily','George','
```

```
33 Carol','Joshua','Michelle','Kevin','Amanda','Brian','
   Melissa','Edward','Deborah']
34
35 hashmap3={}
36
37 for names3 in names_list3:
38
39     results3=hashlib.sha256(names3.encode('utf-8')).
   hexdigest()
40
41     hashmap3[names3]=divmod(int(results3,base=16), 50)
42
43 print(hashmap3)
44
45 #In hash function, greater the mod values, lesser are the
   chances of collision.
```