

AIM :- To study and implement the RSHash (Robert Sedgwick's Hash) function using Python.

PROGRAM:-

```
def RSHash(string):  
    a = 63689  
    b = 378551  
    hash_val = 0  
  
    for ch in string:  
        hash_val = hash_val * a + ord(ch)  
        a = a * b  
  
    return hash_val % (2**32) # limit hash to 32 bits  
  
text = input("Enter any text: ")  
print("RSHash Value:", RSHash(text))
```

OUTPUT :-

```
... Enter any text: HELLO  
RSHash Value: 2180216946
```

CONCLUSION :- RSHash is a simple and efficient hash function that generates a fixed-size numerical value for any input string. It is widely used for data lookup, hashing, and indexing, though it is not suitable for secure cryptographic applications.