

10) To implement the SHA-1 hashing technique using python program.

PROGRAM:-

```
import hashlib

def sha1_hash(inputs):
    def bytes_to_hex(byte_data):
        return ''.join(f'{b:02X}' for b in byte_data)

    for input_str in inputs:
        sha1_hash = hashlib.sha1(input_str.encode()).digest()
        print(f'SHA1("{input_str}") = {bytes_to_hex(sha1_hash)}')

inputs = ["", "abc", "abcdefghijklmnopqrstuvwxy"]

sha1_hash(inputs)
```

OUTPUT:-

```
SHA1("") = DA39A3EE5E6B4B0D3255BFEF95601890AFD80709
SHA1("abc") = A9993E364706816ABA3E25717850C26C9CD0D89D
SHA1("abcdefghijklmnopqrstuvwxy") = 32D10C7B8CF96570CA04CE37F2A19D84240D3A89
```
