JACOB S. SANTOS   **09/23/24**

BSCOE 4-1   **Dr. Ariel Sison**

Assignment SHA-1

Final Result for: 1a7fd53b4c

```
Enter plaintext to be hashed:
la7fd53b4c
Original Message (Hex): la7fd53b4c
Original Message size (bits): 40
Original Message size to hex: 28
Padded Message (Hex): la7fd53b4c800000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000028
Padded message size (bits): 512
W[0]-W[15]:
W[0] = la7fd53b
W[1] = 4c800000
W[2] = 00000000
W[3] = 00000000
W[4] = 00000000
W[5] = 00000000
W[6] = 00000000
W[7] = 00000000
W[8] = 00000000
W[9] = 00000000
W[10] = 00000000
W[11] = 00000000
W[12] = 00000000
W[13] = 00000000
W[14] = 00000000
W[15] = 00000028
```

```
T[75]: A=9eec3055 B=84257988 C=c76126c5 D=362c3664 E=55bb5c2c
T[76]: A=6240e72c B=9eec3055 C=21095e62 D=c76126c5 E=362c3664
T[77]: A=8243ecda B=6240e72c C=67bb0c15 D=21095e62 E=c76126c5
T[78]: A=a8342af0 B=8243ecda C=189039cb D=67bb0c15 E=21095e62
T[79]: A=e1426096 B=a8342af0 C=a090fb36 D=189039cb E=67bb0c15
Final Message Digest (Hex): 488783979801d679394bd83428c28e412b8dee05
```

If Input is not hexadecimal its converted to hexadecimal:

```
Enter plaintext to be hashed:
helloworld
Input was not hexadecimal. Converted to Hex: 68656c6c6f776f726c64
Original Message (Hex): 68656c6c6f776f726c64
Original Message size (bits): 80
Original Message size to hex: 50
Padded Message (Hex): 68656c6c6f776f726c6480000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000050
Padded message size (bits): 512
W[0]-W[15]:
W[0] = 68656c6c
W[1] = 6f776f72
W[2] = 6c648000
W[3] = 00000000
W[4] = 00000000
W[5] = 00000000
W[6] = 00000000
W[7] = 00000000
W[8] = 00000000
W[9] = 00000000
W[10] = 00000000
W[11] = 00000000
W[12] = 00000000
W[13] = 00000000
W[14] = 00000000
W[15] = 00000050
```

```
T[76]: A=76d438ba B=d2db0ec6 C=01989ffe D=a5e754b4 E=f7cd0a3d
T[77]: A=5b5ff6de B=76d438ba C=b4b6c3b1 D=01989ffe E=a5e754b4
T[78]: A=b4d51dc1 B=5b5ff6de C=9db50e2e D=b4b6c3b1 E=01989ffe
T[79]: A=039a8e82 B=b4d51dc1 C=96d7fdb7 D=9db50e2e E=b4b6c3b1
Final Message Digest (Hex): 6adfb183a4a2c94a2f92dab5ade762a47889a5a1
```