

```
1  import struct
2
3
4  # UDP Checksum Function
5  def checksum_func(data):
6      checksum = 0
7      data_len = len(data)
8
9      # Appends 0's to the end of data and adjusts data_len
10     if (data_len % 2):
11         data_len += 1
12         data += struct.pack('!B', 0)
13
14     # Compute the sum
15     for i in range(0, data_len, 2):
16         w = (data[i] << 8) + (data[i + 1])
17         checksum += w
18
19     # Wrap around bit
20     checksum = (checksum >> 16) + (checksum & 0xFFFF)
21
22     # Complement the result
23     checksum = ~checksum & 0xFFFF
24     return checksum
25
26
27 # Main Function
28 if __name__ == '__main__':
29     # Example 1
30     msg = bytes("Hello".encode('utf-8'))
31     answer = checksum_func(msg)
32     print(answer)
33
34     # Example 2
35     msg = bytes(1234)
36     answer = checksum_func(msg)
37     print(answer)
38
```