

```

1 """ Packet Class for sender, receiver and channel.
2
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5     """
6
7
8 class Packet(object):
9     def __init__(self, pac_type, seqno, data_len, data, checksum=0):
10         self.magicno = 0x497E
11         self.pac_type = pac_type # integer, 0 = dataPacket, 1 = acknowledgementPacket
12         self.seqno = seqno # integer
13         self.data_len = data_len # integer
14         self.checksum = checksum # hex number
15         self.data = data # string
16
17         if self.checksum == 0:
18             self.checksum = self.calculate_checksum()
19
20     def calculate_checksum(self):
21         checksum = self.magicno + self.pac_type + self.seqno + self.data_len
22
23         return checksum
24
25
26 class Header(object):
27     def __init__(self, header):
28         self.magicno = header[0]
29         self.checksum = header[1]
30         self.pac_type = header[2]
31         self.seqno = header[3]
32         self.data_len = header[4]

```