

▼ Plot del segnale da un ricevitore a infrarossi

```
1 # Dati sperimentali
2 irData = [(0, 6487), (1, 3295), \
3           (0, 394), (1, 444), (0, 367), (1, 417), (0, 394), (1, 1251), (0, 398), (1, 448), \
4           (0, 344), (1, 448), (0, 367), (1, 453), (0, 367), (1, 448), (0, 362), (1, 457), \
5           (0, 367), (1, 1283), (0, 362), (1, 1255), (0, 394), (1, 417), (0, 376), (1, 1260), \
6           (0, 398), (1, 1292), (0, 371), (1, 1260), (0, 398), (1, 1260), (0, 398), (1, 1273), \
7           (0, 371), (1, 421), (0, 398), (1, 453), (0, 371), (1, 453), (0, 371), (1, 421), \
8           (0, 398), (1, 1292), (0, 371), (1, 453), (0, 367), (1, 457), (0, 349), (1, 435), \
9           (0, 398), (1, 1287), (0, 371), (1, 1292), (0, 371), (1, 1292), (0, 367), (1, 1287), \
10          (0, 349), (1, 421), (0, 394), (1, 1287), (0, 367), (1, 1287), (0, 367), (1, 1287), \
11          (0, 367), (1, 30416), (0, 13251), (1, 3944), (0, 838), (1, 51833)]
```

```
1 import matplotlib.pyplot as plt
2
3 graph_data_x = []
4 graph_data_y = []
5 cursor = 0.
6 for i in range(len(irData)):
7     graph_data_x.append(cursor)
8     graph_data_y.append(irData[i][0])
9
10    cursor += irData[i][1]
11    graph_data_x.append(cursor)
12    graph_data_y.append(irData[i][0])
13
14    if irData[i][1] > 20_000:
15        break
16
17 fig = plt.figure(figsize = (18,1))
18 plt.axis('off')
19 plt.plot(graph_data_x, graph_data_y, 'green')
20 fig.savefig('irData.png')
```



```
1 def decode(data):
2     outbin = ''
3     for val, us in data:
4         if val != 1:
5             continue
6         if outbin and us > 2000:
7             break
8         elif us < 1000:
9             outbin += '0'
10        elif 1000 < us < 2000:
11            outbin += '1'
12    return outbin
```

```
1 decode(irData)
```

```
➞ '00100000110111110000100011110111'
```

+ Code

+ Text

