The nearest neighbor algorithm

1. Import data from csv.file to python with csv library and transformation list of str to list of int. In QS replace '?' by 0.
2. Create a function for calculating the distance between two objects
   I used a Euclidean distance

```
def distance(x, y):
    square_differences = [(x[i]-y[i])**2 for i in range(len(x))]
    return math.sqrt(sum(square_differences))
```

3. Create a final function for predict answer. Function choose a min distance between object in QS and all objects in TS. Answer for QS is an answer for object in TS with min distance

```
def predict(x):
    dist = []
    for i in range(len(TrainingSet)):
        dd = distance(TrainingSet[i],x)
        dist.append(dd)
    for i in range(len(dist)):
        if dist[i]==min(dist):
            di=i
    return TrainingSet[di][length]
```

4. Save all answer (OUT) to csv file.