Cutting Frequency Determination (CFD) score calculator

This script calculates the CFD score for a given sgRNA and off-target sequence.

Requirements:
Software: Python 2.7
Packages:
1. pickle
2. re
3. numpy

The pickle files with the mismatch (mismatch_score.pkl) and PAM scores (pam_scores.pkl) should be in the working directory.

Inputs:
1. *--wt* : Specify the sequence of WT sgRNA. **20mer sgRNA+PAM sequence** is required.
2. *--off* : Specify the off-target sequence. **20mer+PAM** is required

Output:
The CFD score will be printed on the screen.

To run this code, type on the terminal:
python cfd-score-calculator.py --wt <23mer sequence> --off <23mer off-target sequence>

The sequences entered should not contain any letters other than A,T,C or G.