

totalstation-convert.py

```
001 # Parsen und konvertieren von Tachymeter-Daten
002 # #####
003
004 # Authors:
005 # Joshua Wolf
006 # Silas Teske
007 # Lasse Zeh
008 # Christopher Mahn
009
010 # #####
011
012 # Import of Libraries
013 # -----
014
015 # import math as m
016 # import string as st
017 # import random as r
018 import numpy as np
019 import os
020
021
022 # -----
023 # Debugging-Settings
024
025 verbose = True # Shows more debugging information
026
027
028 # Functions
029 # -----
030
031
032 # Classes
033 # -----
034
035
036 # Beginning of the Programm
037 # -----
038
039 if __name__ == '__main__':
040
041     # Import der Messwerte des Tachymeters
042     file = open(os.path.join("data", "totalstation_data.txt"))
043     totalstation_data = file.readlines()
044     file.close()
045     totalstation_data.pop(0)
046     for i, e in enumerate(totalstation_data):
047         totalstation_data[i] = e.strip().split(";")
048         temp = []
049         for j, f in enumerate(totalstation_data[i]):
050             if(j != 1):
051                 temp.append(float(f))
052             else:
053                 temp.append(f)
054         totalstation_data[i] = temp
055
056     for i, e in enumerate(totalstation_data):
057         totalstation_data[i][3] = e[3] / 200 * np.pi
058         totalstation_data[i][4] = e[4] / 200 * np.pi
059
060     # Export
061     file = open(os.path.join("data", "totalstation_data_converted.txt"), "w")
062     for i in totalstation_data:
063         for j, e in enumerate(i):
064             if(j == 0):
065                 file.writelines(f"{e}")
066             else:
067                 file.writelines(f"; {e}")
068         file.writelines(f"\n")
069     file.close()
```