Zusatzstudium "Digital Skills"

CheatSheet: Python 2

OSTBAYERISCHE TECHNISCHE HOCHSCHULE REGENSBURG

PYTHON

Strings

```
length = len(name)
upper = before.upper()
lower= before.lower()
words = sentence.split()
count =
sentence.count("a")
```

Dictionaries

```
phonebook = {
    "Polizei": 110,
    "Feuerwehr": 112
}

if name in phonebook:
      print(f"Number:
{phonebook[name]}")
```

Listen

```
scores = [72, 73]
scores.append(75)
average =
(scores[0] + scores[1] + scores[2]) / 3

if average in scores:
   print("Average is in scores")

print(f"Anzahl Einträge:{len(scores)}")
print(f"Summe Einträge:{sum(scores)}")
```

Parameter Shell

```
import sys
def main():
 if len(sys.argv) == 2:
  print(f"hi,{sys.argv[1]}")
 else:
  print("Wrong param count")
  # 1 = Mit Fehler beendet
  # 0 = Erfolgreich beendet
  sys.exit(1)
```

LEGO® MINDSTORM PYTHON

Motor

```
from mindstorm import MotorPair

motor_pair = MotorPair('A', 'B')
motor_pair .set_default_speed(30)
# Drehen
motor_pair.move_tank(10, 'cm', 25, 75)
motor.move(4, 'seconds')
```

Sensoren

```
from mindstorm import DistanceSensor
from mindstorm import ColorSensor

distanceSens = DistanceSensor('D')
result =distanceSens.get_distance_cm()
distanceSens.
 wait_for_distance_closer_than(10, 'cm')

colorSens = ColorSensor('C')
color = colorSens.get_color()
colorSens.wait_until_color('blue')
```

Feedback / Ausgaben

```
from mindstorm import MSHub

hub = MSHub()
hub.light_matrix_show_image('HAPPY')
hub.play_sound('Damage')
```

python™