Date: / /

Lab 8:

Mean Max using python

```
mcmax_mapper.py
import sys
MISSING = 9999

for line in sys.stdin:
    line = line.strip()
    if len(line) < 93:
        continue
    month = line[19:21]
    if line[87] == '+':
        temperature = int(line[88:92])
    else:
        temperature = int(line[87:92])
    quality = line[92:93]
    if temperature != MISSING and quality in
        ['0', '1', '4', '5', '9']:
        print(f"{month}\t{temperature}")
```

```
mean max_reducer.py

import sys
current_month = None
    temp = []

def emit_average(month, temp_list):
    max_temp = 0
    total = 0
    count = 0
    days = 0
    for t in temp_list:
        if t > max_temp:
            max_temp = t
```

```
count += 1
if count == 3:
    total += max_temp
    max_temp = 0
    count = 0
    days += 1
if days > 0:
    average = total // days
print(f"{month}\t{average}")
for line in sys.stdin:
    line = line.strip()
    if not line:
        continue
    month, temp = line.split('\t')
    temp = int(temp)
    if current_month == month:
        temps.append(temp)
    else:
        if current_month:
            emit_average(current_month, temps)
        current_month = month
        temps = [temp]
    if current_month:
        emit_average(current_month, temps)
```