1001,John,45
1002,Jane,68
1003,Bob,75
1004,Alice,55
1005,Charlie,90
1006,Eve,82
1007,David,63
1008,Frank,78
1009,Grace,92
1010,Henry,60
1011,Isabel,70
1012,Jack,80
1013,Kate,88
1014,Liam,50
1015,Mia,72
1016,Noah,65
1017,Olivia,85
1018,Peter,58

mapper.py

```
#!/usr/bin/env python

import sys

# Input comes from standard input
for line in sys.stdin:
# Remove leading and trailing whitespace
line = line.strip()
# Split the line into fields
student_id, name, marks = line.split(',')
# Convert marks to integer
marks = int(marks)
# Emit key-value pairs where key is the marks and value is the entire student record
print('%d\t%s,%s' % (marks, student_id, name))
```

reducer.py

```
#!/usr/bin/env python

import sys

# Initialize variables to hold top 5 and bottom 5 students
top_students = []
bottom_students = []
```

```
# Input comes from standard input
for line in sys.stdin:
# Remove leading and trailing whitespace
line = line.strip()
# Split the line into key and value
marks, record = line.split('\t')
# Check if the student is in the top 5 or bottom 5
if len(top_students) < 5:
top_students.append((int(marks), record))
elif len(bottom_students) < 5:
bottom_students.append((int(marks), record))

# Output the records of top 5 and bottom 5 students
print("Top 5 Students:")
for student in top_students:
print(student[1]) # Output the entire student record

print("\nBottom 5 Students:")
for student in bottom_students:
print(student[1]) # Output the entire student record
```