

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
1019,Quinn,76
1020,Riley,95

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 student ID and value is the marks
```

```
print('%s\t%d' % (student_id, marks))
```

reducer.py

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

```
import sys
```

```
# Initialize variables to hold student IDs and marks
```

```
student_ids = []
```

```
marks = []
```

```
# 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
    student_id, mark = line.split('\t')
    # Convert mark to integer
    mark = int(mark)
    # Check if mark is above 60
    if mark > 60:
        # Append student ID and mark to their respective lists
        student_ids.append(student_id)
        marks.append(mark)

# Output filtered student IDs and marks
for i in range(len(student_ids)):
    print('%s\t%d' % (student_ids[i], marks[i]))
```