For a given Text file, Create a Map Reduce program to sort the content in an alphabetic order listing only top 10 maximum occurrences of words.

Mapper.py

```
import sys
# Read input from STDIN
for line in sys.stdin:
    # Remove leading and trailing whitespace
    line = line.strip()
    # Split the line into words
    words = line.split()
    # Emit the word along with a count of 1
    for word in words:
        print(f"{word}\t1")
```

Reducer.py

```
import sys
from collections import defaultdict
word_counts = defaultdict(int)
# Read input from STDIN
for line in sys.stdin:
    # Remove leading and trailing whitespace
    line = line.strip()
    # Parse the input we got from mapper.py
    word, count = line.split('\t', 1)
    # Convert count from string to int
    try:
        count = int(count)
    except ValueError:
```

```
        continue
    # Increment word count
    word_counts[word] += count

# Sort words alphabetically
sorted_words = sorted(word_counts.items(), key=lambda x: x[0])

# Emit the top 10 words with the highest counts
for word, count in sorted(sorted_words, key=lambda x: -x[1])[:10]:
    print(f"{word}\t{count}")
```