#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <pthread.h>

pthread\_mutex\_t m;

char sentence[1000];

char words[100][100];

int word\_count;

char\* word;

int ok;

int counter;

int ok2;

char reverse\_sentence[1000];

void\* reverse(void\* param)

{

char\* sentence = (char\*)param;

pthread\_mutex\_lock(&m);

if(ok == 0)

{

word = strtok(sentence, " \n");

strcpy(words[0], word);

ok = 1;

}

pthread\_mutex\_unlock(&m);

while(word != NULL)

{

pthread\_mutex\_lock(&m);

word\_count++;

word = strtok(NULL, " \n");

if(word != NULL)

{

strcpy(words[word\_count], word);

}

pthread\_mutex\_unlock(&m);

}

pthread\_mutex\_lock(&m);

if(ok2 == 0)

{

counter = word\_count - 1;

ok2 = 1;

while(counter >= 0)

{

strcat(reverse\_sentence, words[counter]);

strcat(reverse\_sentence, " ");

counter--;

}

}

pthread\_mutex\_unlock(&m);

pthread\_exit(NULL);

}

int main(int argc, char\*\* argv)

{

printf("Enter the sencte: ");

fgets(sentence, 1000, stdin);

pthread\_t t[5];

pthread\_mutex\_init(&m, NULL);

for(int i = 0; i < 5; i++)

{

pthread\_create(&t[i], NULL, reverse, sentence);

}

if(word\_count < 6)

{

printf("You need to enter at least 6 words\n");

return 0;

}

printf("%s\n", reverse\_sentence);

for(int i = 0; i < 5; i++)

pthread\_join(t[i], NULL);

pthread\_mutex\_destroy(&m);

return 0;

}