**MULTITHREADING**

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1. Name:

#include <pthread.h>

#include <stdlib.h>

#include <stdio.h>

#include <unistd.h>

// printWelcomeMessage will be called when the Thread is created in the main function

// which takes string as an argument

void \*printWelcomeMessage(void \*names) {

sleep(2);

char \*name = (char \*)names;

printf("\n[THREAD] Hello, Welcome %s.", name);

pthread\_exit(NULL);

}

int main () {

// thread defintion

pthread\_t threads[7];

// parameter to be passed to the called function - printWelcomeMessage

char names[10][15] = {"Amritha","Praveen","Saurabh","Sangeetha","Lakshmy","Srinivasan","Ramaguru"};

int result;

for(int i = 0; i < 7; i++ ) {

printf("\n[MAIN] Creating thread, %d", i);

// Creating the threading and thus calling the function with parameter passed to it

result = pthread\_create(&threads[i], NULL, printWelcomeMessage, (void \*)names[i]);

if (result) {

printf("Error in creating thread, %d ", result);

exit(-1);

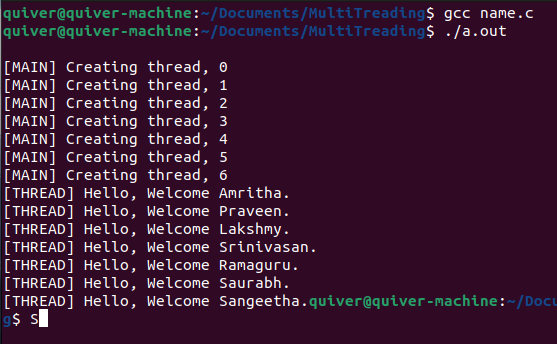
}

}

// Exit the thread

pthread\_exit(NULL);

}



1. ID:

#include <pthread.h>

#include <stdlib.h>

#include <stdio.h>

#include <unistd.h>

// printWelcomeMessage will be called when the Thread is created in the main function

// which takes string as an argument

struct myname{

int val1;

int val2;

}a;

void \*printWelcomeMessage(void \*threadid) {

sleep(2);

long tid=(long)threadid;

printf("\n[THREAD] Hello, Welcome %ld.", tid);

pthread\_exit(NULL);

}

int main () {

// thread defintion

pthread\_t threads[5];

// parameter to be passed to the called function - printWelcomeMessage

char threadid[10][15] = {"Amritha","Praveen","Saurabh","Sangeetha","Lakshmy","Srinivasan","Ramaguru"};

int result;

for(int i = 0; i < 7; i++ ) {

printf("\n[MAIN] Creating thread, %d", i);

// Creating the threading and thus calling the function with parameter passed to it

result = pthread\_create(&threads[i], NULL, printWelcomeMessage, (void \*)threadid[i]);

if (result) {

printf("Error in creating thread, %d ", result);

exit(-1);

}

}

// Exit the thread

pthread\_exit(NULL);

}

Graphical user interface, text

Description automatically generated

1. Addition:

#include <pthread.h>

#include <stdlib.h>

#include <stdio.h>

#include <unistd.h>

// printWelcomeMessage will be called when the Thread is created in the main function

// which takes string as an argument

void \*addition() {

int value1;

int value2;

printf("Enter the 1st element:");

scanf("%d",&value1);

printf("Enter the 2nd element:");

scanf("%d",&value2);

int total = value1 + value2;

printf("%d",total);

}

int main () {

// thread defintion

pthread\_t threads;

int result;

// Creating the threading and thus calling the function with parameter passed to it

result = pthread\_create(&threads, NULL, addition, NULL);

if (result) {

printf("Error in creating thread, %d ", result);

exit(-1);

}

// Exit the thread

pthread\_exit(NULL);

}

Text

Description automatically generated