# SP19-BCS-078

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# Lab task 8

# Task 2:

#include<stdio.h>

#include<string.h>

#include<pthread.h>

#include<stdlib.h>

#include<unistd.h>

pthread\_t tid[2];

void\* doSomeThing(void \*arg)

{

unsigned long i = 0;

pthread\_t id = pthread\_self();

if(pthread\_equal(id,tid[0]))

{

printf("\n A \n");

}

else

{

printf("\n B \n");

}

for(i=0; i<(0xFFFFFFFF);i++);

return NULL;

}

int main(void)

{

int i = 0;

int err;

while(i < 2)

{

err = pthread\_create(&(tid[i]), NULL, &doSomeThing, NULL);

if (err != 0)

printf("\ncan't create thread :[%s]", strerror(err));

else

printf("\n Thread created successfully\n");

i++;

}

sleep(5);

return 0;

}

# Output:

Text

Description automatically generated

# Task 3:

#include<stdio.h>

#include<string.h>

#include<pthread.h>

#include<stdlib.h>

#include<unistd.h>

#define size 3

int mat[size][size] = {{1,2,3},{1,2,3},{1,2,3}};

int res[size][size];

//no of rows

int ind = 2;

pthread\_t tid[3];

void\* multiple(void \*arg)

{

unsigned long i = 0;

pthread\_t id = pthread\_self();

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

for(int j = 0;j<size;j++){

res[ind][i] += mat[ind][j] \* mat[j][i];

}

}

ind--;

return NULL;

}

int main(void)

{

int i = 0;

int err;

while(i < 3)

{

err = pthread\_create(&(tid[i]), NULL, &multiple, NULL);

if (err != 0)

printf("\ncan't create thread :[%s]", strerror(err));

else

printf("\n Thread created successfully\n");

i++;

}

sleep(5);

for(int j=0;j<3;j++){

for(int k=0;k<3;k++){

printf("%d\t",res[j][k]);

}

printf("\n");

}

return 0;

}

# Output:

Text

Description automatically generated