

EX NO: 8A	IMPLEMENTATION OF THREADING AND SYNCHRONIZATION APPLICATIONS
DATE:	

AIM:

To implement threading and synchronization techniques using c language.

ALGORITHM:

Step 1: Start the program.

Step 2: Identify the thread by an id called ThreadId.

Step 3: Represent the thread id by the type pthread_t.

Step 4: Include the header file “#include<pthread.h>” to access the thread functions. Step

5: This function is used to create a thread pthread_create.

Step 6: If the thread is created successfully, return value will be zero,

Otherwise pthread_create will return an error number of type integer. Step 7:

Stop the program.

PROGRAM:

```

#include <stdio.h>
#include <pthread.h>

/*thread function definition*/
void* threadFunction(void* args)
{
while(1)
    {
        printf("I am threadFunction.\n");
    }
} int
main()
{
    /*creating    thread
id*/    pthread_t id;
int ret;

    /*creating thread*/

ret=pthread_create(&id,NULL,&threadFunction,NULL);
if(ret==0){
    printf("Thread created successfully.\n");
} else{    printf("Thread
not created.\n");
    return 0; /*return from main*/
}

while(1)
{
    printf("I am main function.\n");
}

return 0;
}

```

OUTPUT:

Thread created successfully.

I am threadFunction.

I am threadFunction.

I am threadFunction.

I am threadFunction.

...

...

I am threadFunction.

I am main function.

I am main function.

I am main function.

I am main function.

...

...

I am main function.

I am threadFunction.

... and so on.

RESULT:

Thus to implement threading and synchronization techniques using c language has been executed and verified successfully.
