Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

09

LIST OF TASKS

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| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | **Write a program to Create thread with CreatThread () function output must be display with success message and thread ID.** |
| 2 | **Write a program that create 5 times thread with thread ID at once time** |
| 3 | **Run a loop that has program to print ten times thread ID, meanwhile use exit thread function that-should be interrupt when counter reaches on3rd.** |

Submitted On:

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(Date: DD/MM/YY)

**Task # 01: Write a program to Create thread with CreatThread () function output must be display with success message and thread ID.**

**Solution:**

#include<iostream>

#include<Windows.h>

using namespace std;

DWORD WINAPI MyThreadFun(LPVOID lpParam){

    cout<<"Running of thread"<<endl;

    return 0;

}

int main(){

    HANDLE hThread;

    DWORD ThreadId;

    hThread=CreateThread(NULL,0,MyThreadFun,NULL,0,&ThreadId);

    if(hThread==NULL){

        cout<<"Thread not created"<<endl;

    }

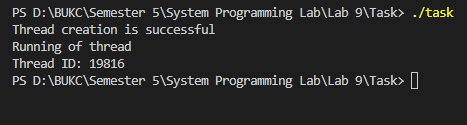
    cout<<"\nThread creation is successful"<<endl;

    cout<<"Thread ID: "<<ThreadId<<endl;

    return 0;

}

**Output:**



**Task # 02: Write a program that create 5 times thread with thread ID at once time.**

**Solution:**

#include <stdlib.h>

#include <stdio.h>

#include <pthread.h>

#include<iostream>

using namespace std;

void \* start\_thread (void \*message)

{

    cout<<"Thread no: "<<(int ) message<<endl;

    return message;

}

int main (void)

{

 pthread\_t \_id[5];

 for(int i=0;i<5;i++)

 {

    pthread\_create ((\_id+i), NULL, start\_thread, (void \*) (\_id+i));

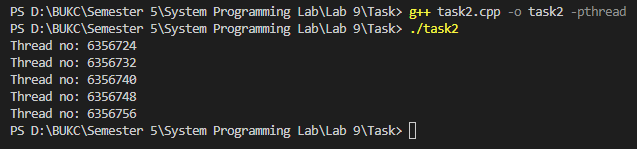
    pthread\_join (\_id[i], NULL);

 }

 return 0;

}

**Output:**



**Task # 03: Run a loop that has program to print ten times thread ID, meanwhile use exit thread function that-should be interrupt when counter reaches on3rd.**

**Solution:**

#include <stdlib.h>

#include <stdio.h>

#include <pthread.h>

#include<iostream>

using namespace std;

void \* start\_thread (void \*message)

{

    cout<<"Thread no: "<<(int ) message<<endl;

    return message;

}

int main (void)

{

 pthread\_t \_id[5];

 int ret;

 for(int i=0;i<10;i++)

 {

    ret = pthread\_create ((\_id+i), NULL, start\_thread, (void \*) (\_id+i));

    if (!ret)

    {

        // cout<<i<<" ";

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

        if((i+1)%3==0)

        {

            pthread\_exit(NULL);

        }

    }

 }

 return 0;

}

**Output:**

