Write program to calculate sum of n numbers using thread library.

**CODE**

#include<pthread.h>

#include<stdio.h>

#include<stdlib.h>

*int* sum;

*void* \*runner(*void* \**param*);  *// threads calls this function*

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

{

*pthread\_t* tid;

*pthread\_attr\_t* attr;

    if(*argc*!=2)

    {

        fprintf(stderr,"Usage : a.out<integer value>\n");

        return -1;

    }

    if(atoi(*argv*[1])<0)

    {

        fprintf(stderr,"%d must be >=0\n",atoi(*argv*[1]));

        return -1;

    }

    pthread\_attr\_init(&attr);

    pthread\_create(&tid,&attr,runner,*argv*[1]);

    pthread\_join(tid,NULL);

    printf("Sum = %d\n",sum);

}

*void* \*runner(*void* \**param*)

{

*int* i , upper=atoi(*param*);

    sum=0;

    for(i=1 ;i<=upper ;i++)

    {

        sum += i;

    }

    pthread\_exit(0);

}

**OUTPUT**

**Text

Description automatically generated**