OPERATING SYSTEM LAB TASK 1

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QUESTION 1:

CODE:

#include<stdio.h>

#include<pthread.h>

int array[50],n,i,key;

void \*thread1()

{

int f=0;

printf("Please enter your required range: \n");

scanf("%d",&n);

for(i=0;i<n;i++){

printf("Please Enter the number: \n");

scanf("%d",&array[i]);

}

printf("Thread Number: \n");

printf("Enter your key to be found: \n");

scanf("%d",&key);

for(i=0;i<n;i++){

if(array[i] == key)

f=1;

}

if(f == 1){

printf("Key element found \n");

}

else{

printf("Key not present\n");

} }

void \*Sorting()

{

int f=0;

printf("Thread Number: \n");

printf("Enter your key to be found: \n");

scanf("%d",&key);

for(i=0;i<n; i++){

if(array[i] == key){

f=1;

} }

if(f == 1) {

printf("Key element found \n"); }

else {

printf("Key not present\n");

} }

int main() {

int n,i;

pthread\_t threadno1;

pthread\_t threadno2;

pthread\_t threadno3;

pthread\_t threadno4;

pthread\_t threadno5;

n=pthread\_create(&threadno1,NULL,&thread1,NULL);

pthread\_join(threadno1,NULL);

n=pthread\_create(&threadno2,NULL,&Sorting,NULL);

pthread\_join(threadno2,NULL);

n=pthread\_create(&threadno3,NULL,&Sorting,NULL);

pthread\_join(threadno3,NULL);

n=pthread\_create(&threadno4,NULL,&Sorting,NULL);

pthread\_join(threadno4,NULL);

n=pthread\_create(&threadno5,NULL,&Sorting,NULL);

pthread\_join(threadno5,NULL);

}

Text

Description automatically generated