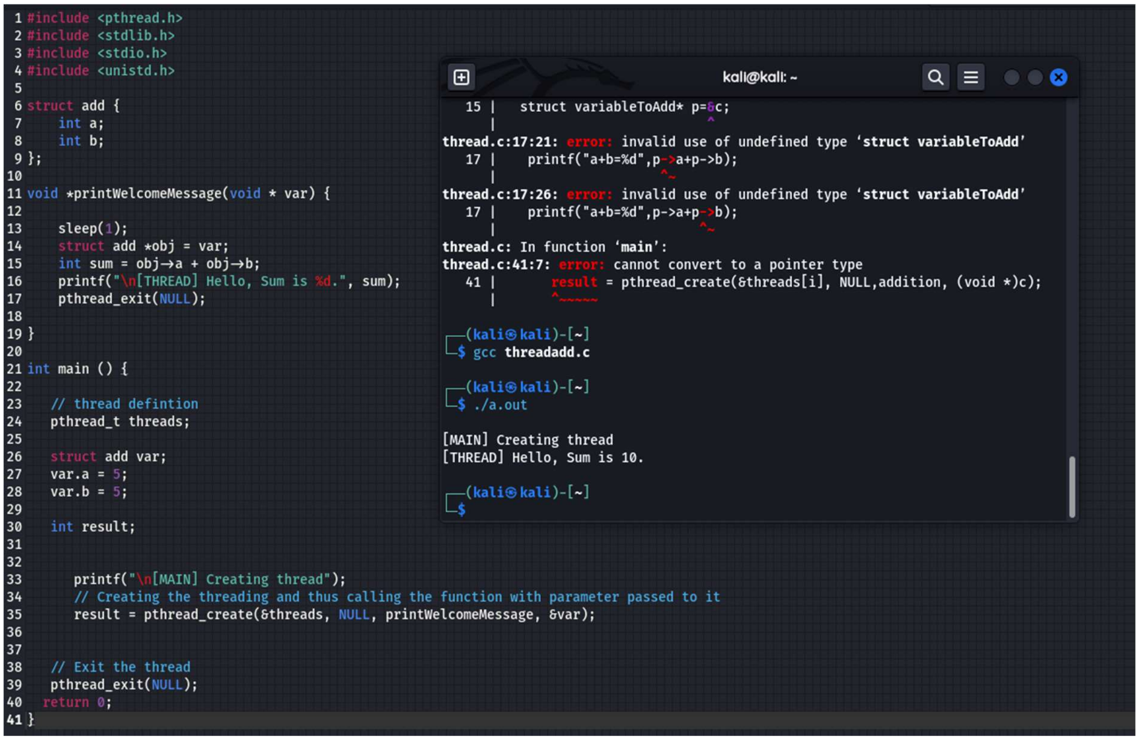
THREAD

Lakshmi Narayan P CB.EN.U4CYS21034

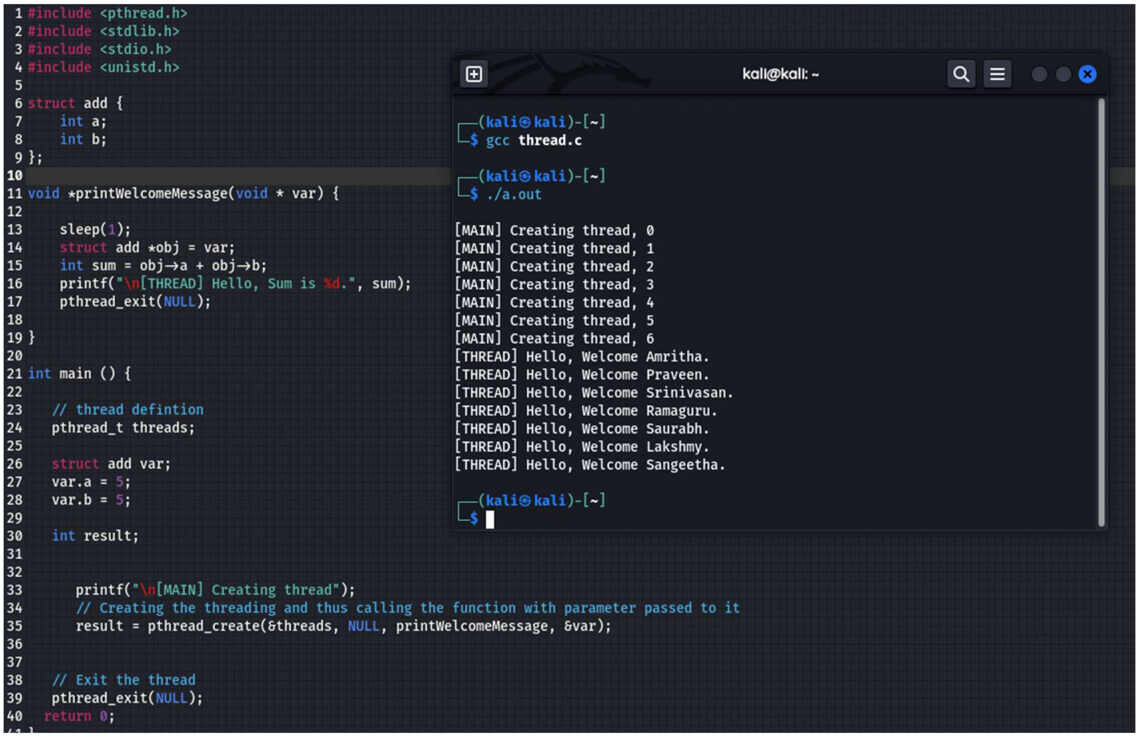
1)Thread add



```c
#include <pthread.h>
#include <stdlib.h>
#include <stdio.h>
#include <unistd.h>

struct add {
    int a;
    int b;
};

void *printWelcomeMessage(void * var) {

    sleep(1);
    struct add *obj = var;
    int sum = obj->a + obj->b;
    printf("\n[THREAD] Hello, Sum is %d.", sum);
    pthread_exit(NULL);

}

int main () {

   // thread defintion
   pthread_t threads;

   struct add var;
   var.a = 5;
   var.b = 5;

   int result;


      printf("\n[MAIN] Creating thread");
      // Creating the threading and thus calling the function with parameter passed to it
      result = pthread_create(&threads, NULL, printWelcomeMessage, &var);


   // Exit the thread
   pthread_exit(NULL);
  return 0;
}
```

```
   15 |   struct variableToAdd* p=&c;
      |                           ^
thread.c:17:21: error: invalid use of undefined type ‘struct variableToAdd’
   17 |    printf("a+b=%d",p->a+p->b);
      |                     ^~
thread.c:17:26: error: invalid use of undefined type ‘struct variableToAdd’
   17 |    printf("a+b=%d",p->a+p->b);
      |                          ^~
thread.c: In function ‘main’:
thread.c:41:7: error: cannot convert to a pointer type
   41 |       result = pthread_create(&threads[i], NULL,addition, (void *)c);
      |       ^~~~~~

┌──(kali㉿kali)-[~]
└─$ gcc threadadd.c

┌──(kali㉿kali)-[~]
└─$ ./a.out

[MAIN] Creating thread
[THREAD] Hello, Sum is 10.

┌──(kali㉿kali)-[~]
└─$
```

2)Thread



```c
#include <pthread.h>
#include <stdlib.h>
#include <stdio.h>
#include <unistd.h>

struct add {
    int a;
    int b;
};

void *printWelcomeMessage(void * var) {

    sleep(1);
    struct add *obj = var;
    int sum = obj->a + obj->b;
    printf("\n[THREAD] Hello, Sum is %d.", sum);
    pthread_exit(NULL);

}

int main () {

   // thread defintion
   pthread_t threads;

   struct add var;
   var.a = 5;
   var.b = 5;

   int result;


      printf("\n[MAIN] Creating thread");
      // Creating the threading and thus calling the function with parameter passed to it
      result = pthread_create(&threads, NULL, printWelcomeMessage, &var);


   // Exit the thread
   pthread_exit(NULL);
  return 0;
```

```
┌──(kali㉿kali)-[~]
└─$ gcc thread.c

┌──(kali㉿kali)-[~]
└─$ ./a.out

[MAIN] Creating thread, 0
[MAIN] Creating thread, 1
[MAIN] Creating thread, 2
[MAIN] Creating thread, 3
[MAIN] Creating thread, 4
[MAIN] Creating thread, 5
[MAIN] Creating thread, 6
[THREAD] Hello, Welcome Amritha.
[THREAD] Hello, Welcome Praveen.
[THREAD] Hello, Welcome Srinivasan.
[THREAD] Hello, Welcome Ramaguru.
[THREAD] Hello, Welcome Saurabh.
[THREAD] Hello, Welcome Lakshmy.
[THREAD] Hello, Welcome Sangeetha.

┌──(kali㉿kali)-[~]
└─$
```