Experiment 11

Aim: Write a program to create threads in Linux

vi thread.c

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <pthread.h>
void *thread_function(void
*arg);
int i, j;
int main()
{pthread_t a_thread;
   pthread_create(&a_thread,
NULL, thread_function,
NULL);
   pthread_join(a_thread,
NULL);
   printf("Inside main
program\n");
   for(j = 20; j <= 25; j++)
   {printf("j : %d\n", j);
      sleep(1);}}
void *thread_function(void
*arg)
{printf("Inside thread\n");
   for(i = 0; i < 5; i++)
   {printf("i : %d\n", i);
      sleep(1);}}

:wq

gcc thread.c -o thread -lpthread

./thread
```

```
localhost:~/aatif# vi thread.c
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <pthread.h>
void *thread_function(void *arg);  // thread function declaration

int i, j;  // global variable declaration

int main()
{
    pthread_t a_thread;  // thread declaration

    pthread_create(&a_thread, NULL, thread_function, NULL);
    pthread_join(a_thread, NULL);  // process waits for thread to finish

    printf("Inside main program\n");
    for(j = 20; j < 25; j++)
    {
        printf("j : %d\n", j);
        sleep(1);
    }
}
void *thread_function(void *arg)
{
    printf("inside thread\n");
    for(i = 0; i < 5; i++)
    {
        printf("i : %d\n", i);
        sleep(1);
    }
}
:wq
localhost:~/aatif# gcc thread.c -o thread -lpthread
localhost:~/aatif# ./thread
inside thread
i : 0
i : 1
i : 2
i : 3
i : 4
Inside main program
j : 20
j : 21
j : 22
j : 23
j : 24
```