**ST. XAVIER’S COLLEGE**

**(Affiliated to Tribhuvan University)**

**Maitighar, Kathmandu**

****

**OPERATING SYSTEM LAB REPORT #08**

**SUBMITTED BY:**

Pradeep Dahal

017BSCIT029

2nd year/ 4th sem

|  |  |
| --- | --- |
|  | Signature |
| Mr. Rabin Maharjan  (Lecturer) |  |
| Department of Computer Science | |

**SUBMITTED TO:**

**Interprocess Communication**

**Synchronization**

This program demonstrates the solution (strict alternation) for critical region problem.

#include<stdlib.h>

#include<unistd.h>

#include<pthread.h>

#include<stdio.h>

void \*thread1f (void \* arg);

void \*thread2f (void \* arg);

int turn = 1;

int main()

{

pthread\_t thid1;

pthread\_t thid2;

pthread\_create (&thid1, NULL, &thread1f, NULL);

pthread\_create (&thid2, NULL, &thread2f, NULL);

pthread\_join(thid1, NULL);

pthread\_join(thid2, NULL);

return 0;

}

void \*thread1f(void \*arg)

{

int a = 0;

while(a++<20)

{ while(turn!= 1);

fputc('b',stderr);

turn = 0; }

}

void \*thread2f (void \* arg)

{

int b = 0;

while(b++<20)

{ while(turn != 0);

fputc('a', stderr);

turn = 1; }

}

**Output**

