EXPERIMENT-5

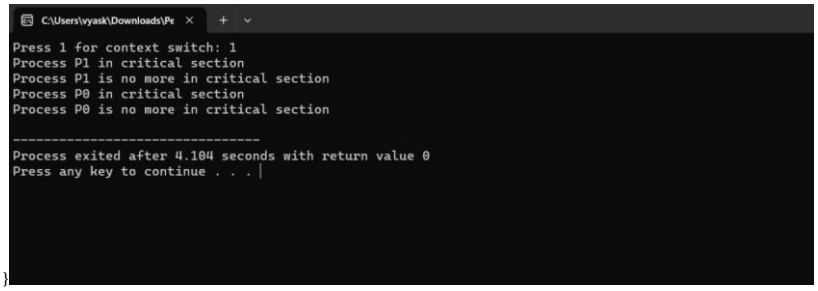
- **Implement peterson's solution for 2 process P0 and P1 in process synchronization.**

```
#include<stdio.h>
#include<stdbool.h>
bool flag[2]={false,false};
int turn=0;

void P1(){
   flag[1]=true;
   turn=1;
   while(turn==0 && flag[0]==true);
   printf("Process P1 in critical section\n");
   flag[1]=false;
   printf("Process P1 is no more in critical section\n");
}

void P0(){
   int b=0;
   flag[0]=true;
   turn=0;
   printf("Press 1 for context switch: ");
   scanf("%d",&b);
   if (b==1){
      P1();
      while(turn==1 && flag[1]==true);
      printf("Process P0 in critical section\n");
      flag[0]=false;
      printf("Process P0 is no more in critical section\n");
   }
   else{
      while(turn==1 && flag[1]==true);
      printf("Process P0 in critical section\n");
      flag[0]=false;
      printf("Process P0 is no more in critical section\n");
      P1();
   }
}

int main()
{
   P0();
   return 0;
```


C:\Users\vyask\Downloads\Pe
Press 1 for context switch: 1
Process P1 in critical section
Process P1 is no more in critical section
Process P0 in critical section
Process P0 is no more in critical section

Process exited after 4.104 seconds with return value 0
Press any key to continue . . .

}