KLE TECHNOLOGICAL UNIVERSITY
Creating Value, Leveraging Knowledge
Belagavi Campus
DR. M. S. SHESHGIRI COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Operating System And Embedded System Design

Team A7

REVIEW – 4

Review Statement : Write a C program with two tasks and resource seven segmentdisplay.

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Guide Signature

CODE:

```
#include<rtl.h>

#include<LPC21xx.h>

#include<stdio.h>

__task void task2(void);

//void init_serial(void);

void delay1(void);

unsigned int Disp1[5] = {0X003F0000, 0X00060000, 0X005B0000, 0X004F0000,
0X00660000};

unsigned int Disp2[5] = { 0X006D0000, 0X007D0000, 0X00070000, 0X007F0000,
0X006F0000};

unsigned int j,i=0;

OS_TID tsk1,tsk2;

OS_SEM semaphorel;

__task void task1(void)

{

OS_RESULT ret;

os_tsk_prio_self(2);

tsk2 = os_tsk_create(task2,1);

while(1)

{

ret = os_sem_wait(semaphorel , 0x01);

if(ret== OS_R_SEM)
```

```
{

IODIR0 = 0xf0ff0000;
   IOSET0 = 0xf0000000;
   for (i = 0; i < 5; i++) {
       IOSET0 = Disp1[i]; //|
       delay1();
delay1();
      IOCLR0 = 0x00ff0000;
}
i=0;
os_sem_send(semaphorel);
}
}
}
__task void task2(void)
{
while(1)
{
os_sem_wait(semaphorel , 0x01);
IODIR0 = 0xf0ff0000;
   IOSET0 = 0xf0000000;
   for (i = 0; i < 5; i++)
{
       IOSET0 = Disp2[i]; //
       delay1();
delay1();
      IOCLR0 = 0x00ff0000;
}
i=0;
os_sem_send(semaphorel);
```

```
}
}
void delay1(void)
{
   unsigned long int j;
   for (j = 0; j < 650000; j++);
}
int main()
{
os_sem_init(semaphorel,1);
os_sys_init(task1);
}
```

IMPLEMENTATION