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

Department of Electronics and Communication

Real Time Operating System Lab

(22EECE302)

REVIEW-3

Team Number-: 12

Team Members

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Statement: Write a C program with three tasks, having task 2 waiting for an even from task 3 for a duration and flag bits of 0xf000 and 0x0001.

Code:

```
#include<rtl.h>
#include<lpc21xx.h>
#include<stdio.h>
OS_TID tsk1,tsk2,tsk3;
OS_RESULT RE1,RE2,RE3;
int cnt1,cnt2,cnt3,cnt4,cnt5,i;
__task void job1(void);
__task void job2(void);
__task void job3(void);

__task void job1(void)
{
        os_tsk_prio_self(2);
        tsk1=os_tsk_self();
        os_tsk_create(job2,1);
        while(1)
        {
                for(i=0;i<15;i++)
                {
                        cnt1++;
                        for(i=0;i<65000;i++);
                        for(i=0;i<65000;i++);
                        for(i=0;i<65000;i++);
                        for(i=0;i<65000;i++);
                }
                os_evt_set(0x0001,tsk2);
                os_dly_wait(30);
        }

        }


__task void job2(void)
{
        os_tsk_prio_self(3);
        tsk2=os_tsk_self();
        os_tsk_create(job3,4);
        while(1)
        {
                RE2=os_evt_wait_or(0x0001,0xf000);
                if(RE2==OS_R_EVT)
```

```
		{
			for(i=0;i<15;i++)
			{
				cnt2++;
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
			}
			os_dly_wait(10);
		}
		else if(RE2==OS_R_TMO)
		{
			for(i=0;i<15;i++)
			{
				cnt5++;
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
				for(i=0;i<65000;i++);
			}
			os_dly_wait(10);
		}
	}
}


__task void job3(void)
{
	while(1)
	{
		for(i=0;i<15;i++)
		{
			cnt3++;
			for(i=0;i<65000;i++);
			for(i=0;i<65000;i++);
			for(i=0;i<65000;i++);
			for(i=0;i<65000;i++);
		}
		os_evt_set(0x0001,tsk1);
		os_dly_wait(30);
	}
}
```

```
int main(void)
{
        cnt1=0;
        cnt2=0;
        cnt3=0;
        cnt4=0;
        cnt5=0;
        os_sys_init(job1);
        while(1);
}
```

Output: