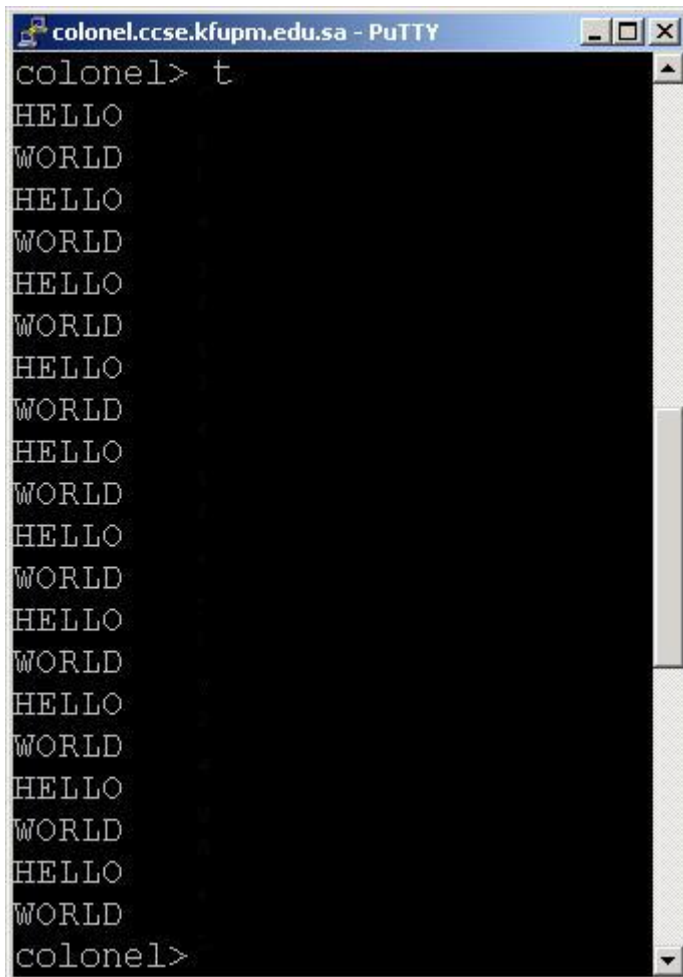# Problem (1)

Assume you have two threads; ThreadA and ThreadB. ThreadA prints "HELLO" *ten* times and ThreadB prints "WORLD" *ten* times.

Write a C code to create these two threads such that the output of your code must be as follows:

You *have to* implement **condition variable** to obtain this output. It's your choice to select an appropriate predicate variable. You can follow my hint.

Hint:
Declare a variable named **turn** of type *character*. Initially this variable has the value 'A'. Then, ThreadA prints "HELLO" only if the content of the variable **turn** is **'A'**. Similarly, ThreadB prints "WORLD" only if the content of the variable **turn** is **'B'**.
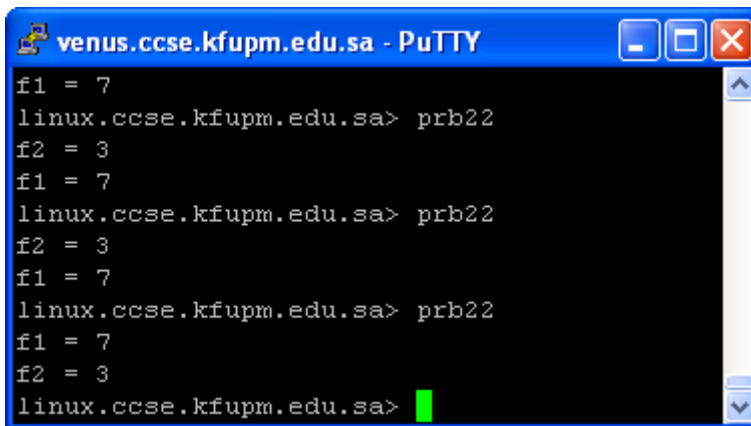
Use only one condition varaible.

Problem (2)

You have two threads; **f1()** and **f2()**, and two global variables **n** & **m** as shown below:

```
int n;
int m;

void *f1(void *arg)
{
        int r;

        m = 5;
        r = n + m;
        printf("f1 = %d\n", r);

        return NULL;
}

void *f2(void *arg)
{
        int r;

        n = 2;
        r = m - n;
        printf("f2 = %d\n", r);
        return NULL;
}
```

Use *Pthread condition variable(s)* such that **f1** and **f2** will print the following output: