

Problema 1

```
#include <stdio.h>
#include <pthread.h>
#include <errno.h>
#include <string.h>
#include <stdlib.h>

void *reverse (void *s)
{
    char *w = (char*) s;
    char *inv = (char*) malloc (strlen(w) * sizeof(char));
    int l = strlen (w);
    for (int i = l - 1; i>=0; i--)
        inv[l - 1 - i] = w[i];
    return inv;
}

int main (int argc, char **argv)
{
    pthread_t thr;
    if (pthread_create(&thr, NULL, reverse, argv[1]))
    {
        perror(NULL);
        return errno;
    }
    char *res;
    if (pthread_join(thr, (void **) &res))
    {
        perror(NULL);
        return errno;
    }
    printf("%s\n", res);
    return 0;
}
```

Problema 2

```
#include <stdio.h>
#include <pthread.h>
#include <errno.h>
#include <string.h>
#include <stdlib.h>

int m[3][3] = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
int mm[3][3] = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
int r[3][3];

void *inmultire(void *v)
{
    int * p = (int*) v;
    for (int j=0; j<3; j++)
        r[p[0]][p[1]] += m[p[0]][j] * mm[j][p[1]];
    return NULL;
}
```

```

int main (int argc, char **argv)
{
    pthread_t thr[3][3];
    int index[2];
    char *res;

    for (int i=0; i<3; i++)
        for (int j=0; j<3; j++)
        {
            int *index = (int*) malloc (sizeof(int)*2);
            index[0] = i;
            index[1] = j;

            if (pthread_create(&thr[i][j], NULL, inmultire, index))
            {
                perror(NULL);
                return errno;
            }
        }

    for (int i=0; i<3; i++)
    {
        for (int j=0; j<3; j++)
        {
            if (pthread_join(thr[i][j], (void **) &res))
            {
                perror(NULL);
                return errno;
            }
        }
    }

    for (int i=0; i<3; i++)
    {
        for (int j=0; j<3; j++)
        {
            printf ("%d ", r[i][j]);
        }
        printf ("\n");
    }

    return 0;
}

```