táblázat

First fit	30	35	15	25	75	45
39					X, 36	
40						X, 5
33		X, 2				
20	X, 10					
21				X, 4		

Next fit	30	35	15	25	75	45
39					X, 36	
40						X, 5
33		X, 2				
20				X, 5		
21					X, 36, 15	

Best fit	30	35	15	25	75	45
39						X, 6
40					X, 35	
33		X, 2				
20				X, 5		
21	X, 9					

Worst fit	30	35	15	25	75	45
39					X, 36	
40						X 5
33					X, 36, 3	
20		X, 15				
21	X, 9					

semset.c

```c
#include <stdio.h>
#include <stdlib.h>
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#define SEMKEY 123456L

int semid,nsems,semnum,rtn;

        int semflg;
        struct sembuf sembuf, *sop;
        union semun arg;
        int cmd;

int main()
{

        nsems = 1;
        semflg = 00666 | IPC_CREAT;
        semid = semget (SEMKEY, nsems, semflg);
        if (semid < 0 ) {perror(" semget hiba"); exit(0);}
        else printf("\n semid: %d ",semid);
        printf ("\n kerem a semval erteket ");

        semnum = 0;

        cmd = SETVAL;
        scanf("%d",&arg.val);
        rtn = semctl(semid,semnum, cmd, arg);
        printf("\n set  rtn: %d ,semval: %d ",rtn,arg.val);
        printf("\n");

}
```

semkill.c

```c
#include <stdio.h>
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#define SEMKEY 123456L

        int semid,nsems,rtn;
        int semflg;
        struct sembuf sembuf, *sop;
        union semun arg;
        int cmd;

main()
{
        nsems = 1;
        semflg = 00666 | IPC_CREAT;
        semid = semget (SEMKEY, nsems, semflg);
        if (semid < 0 )
    {
        perror("Semget hiba!\n");
        exit(0);
    }
        else
    {
        printf("semid: %d\n",semid);
    }

        cmd = IPC_RMID;
        rtn = semctl(semid, 0, cmd, arg);

        printf("kill rtn: %d\n",rtn);
}
```

semup.c

```c
#include <stdio.h>
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#define SEMKEY 123456L

        int semid, nsems, rtn;
        unsigned nsops;
        int semflg;
        struct sembuf sembuf, *sop;

main()
{
        nsems = 1;
        semflg = 00666 | IPC_CREAT;
        semid = semget (SEMKEY, nsems, semflg);
        if (semid < 0 )
    {
        perror("Semget hiba!\n");
        exit(0);
    }

        else
    {
        printf("semid: %d\n", semid);
    }

        nsops = 1;
        sembuf.sem_num = 0;
        sembuf.sem_op = 1;
        sembuf.sem_flg = 0666;
        sop = &sembuf;
        rtn = semop(semid, sop, nsops);
        printf("up rtn: %d\n", rtn);
}
```

semval.c

```c
#include <stdio.h>
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#define SEMKEY 123456L

        int semid,nsems,rtn;
        int semflg;
        struct sembuf sembuf, *sop;
        union semun arg;
        int cmd;

main()
{
        nsems = 1;
        semflg = 00666 | IPC_CREAT;
        semid = semget (SEMKEY, nsems, semflg);
        if (semid < 0 )
        {
            perror("Semget hiba!\n");
            exit(0);
        }
        else
    {
        printf("semid: %d\n", semid);
    }

        cmd = GETVAL;
        rtn = semctl(semid, 0, cmd, NULL);

        printf("semval: %d\n", rtn);
}
```