

# **Operációs rendszerek BSc**

11. gyak.

2021. 04. 28.

**Készítette:**

Simonyák János Bprof  
Üzemtechnikus-informatikus  
MZ727W

**Miskolc, 2021**

## 1) feladat – Helyfoglalás

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	First Fit		Memóriaterület - szabad terület							Next Fit		Memóriaterület - szabad terület					
2	Foglalási igény		30	35	15	25	75	45		Foglalási igény		30	35	15	25	75	45
3		39	30	35	15	25	39, 36	45			39	30	35	15	25	39, 36	45
4		40	30	35	15	25	75	40, 5			40	30	35	15	25	75	40, 5
5		33	30	33, 2	15	25	75	45			33	30	33, 2	15	25	75	45
6		20	20, 10	35	15	25	75	45			20	30	35	15	20, 5	75	45
7		21	30	35	15	21, 4	75	45			21	30	35	15	25	39, 21, 15	45
8																	
9	Best Fit		Memóriaterület - szabad terület							Worst Fit		Memóriaterület - szabad terület					
10	Foglalási igény		30	35	15	25	75	45		Foglalási igény		30	35	15	25	75	45
11		39	30	35	15	25	75	39, 6			39	30	35	15	25	39, 36	45
12		40	30	35	15	25	40, 35	45			40	30	35	15	25	75	40, 5
13		33	30	33, 2	15	25	75	45			33	30	35	15	25	39, 33, 3	45
14		20	30	35	15	20, 5	75	45			20	30	20, 15	15	25	75	45
15		21	21, 9	35	15	25	75	45			21	21, 9	35	15	25	75	45

## 2) feladat – Szemafor

### a) semset.c

```
D: > Projects > MZ727WOsGyak > MZ727W_0428 > C semsetc > ...
1  #include <stdio.h>
2  #include <sys/types.h>
3  #include <sys/ipc.h>
4  #include <sys/sem.h>
5  #define SEMKEY 123456L /* kulcs a semget-nek; remelem, egyedi */
6
7  int semid, nsems, semnum, rtn;
8  int semflg;
9  struct sembuf sembuf, *sop;
10 union semun arg;
11 int cmd;
12
13 int main()
14 {
15
16
17     nsems = 1; /* egyetlen semaphore a set-ben */
18     semflg = 00666 | IPC_CREAT;
19     semid = semget (SEMKEY, nsems, semflg);
20     if (semid < 0 ) {perror(" semget hiba"); exit(0);}
21     else printf("\n semid: %d ",semid);
22     printf ("\n kerem a semval erteket ");
23
24     semnum = 0; /* 0-i semaphort azonositom */
25
26     cmd = SETVAL; /* allitsd be a semaphor erteket */
27     scanf("%d",&arg.val);
28     rtn = semctl(semid,semnum, cmd, arg); /* a semid-vel azonosított
29     |         |         |         |         |
30     |         |         |         |         |
31     |         |         |         |         |
32     |         |         |         |         |
33     |         |         |         |         |
34     |         |         |         |         |
35     |         |         |         |         |
36     |         |         |         |         |
37     |         |         |         |         |
38     |         |         |         |         |
39     |         |         |         |         |
40     |         |         |         |         |
41     |         |         |         |         |
42     |         |         |         |         |
43     |         |         |         |         |
44     |         |         |         |         |
45     |         |         |         |         |
46     |         |         |         |         |
47     |         |         |         |         |
48     |         |         |         |         |
49     |         |         |         |         |
50     |         |         |         |         |
51     |         |         |         |         |
52     |         |         |         |         |
53     |         |         |         |         |
54     |         |         |         |         |
55     |         |         |         |         |
56     |         |         |         |         |
57     |         |         |         |         |
58     |         |         |         |         |
59     |         |         |         |         |
60     |         |         |         |         |
61     |         |         |         |         |
62     |         |         |         |         |
63     |         |         |         |         |
64     |         |         |         |         |
65     |         |         |         |         |
66     |         |         |         |         |
67     |         |         |         |         |
68     |         |         |         |         |
69     |         |         |         |         |
70     |         |         |         |         |
71     |         |         |         |         |
72     |         |         |         |         |
73     |         |         |         |         |
74     |         |         |         |         |
75     |         |         |         |         |
76     |         |         |         |         |
77     |         |         |         |         |
78     |         |         |         |         |
79     |         |         |         |         |
80     |         |         |         |         |
81     |         |         |         |         |
82     |         |         |         |         |
83     |         |         |         |         |
84     |         |         |         |         |
85     |         |         |         |         |
86     |         |         |         |         |
87     |         |         |         |         |
88     |         |         |         |         |
89     |         |         |         |         |
90     |         |         |         |         |
91     |         |         |         |         |
92     |         |         |         |         |
93     |         |         |         |         |
94     |         |         |         |         |
95     |         |         |         |         |
96     |         |         |         |         |
97     |         |         |         |         |
98     |         |         |         |         |
99     |         |         |         |         |
100    |         |         |         |         |
101    |         |         |         |         |
102    |         |         |         |         |
103    |         |         |         |         |
104    |         |         |         |         |
105    |         |         |         |         |
106    |         |         |         |         |
107    |         |         |         |         |
108    |         |         |         |         |
109    |         |         |         |         |
110    |         |         |         |         |
111    |         |         |         |         |
112    |         |         |         |         |
113    |         |         |         |         |
114    |         |         |         |         |
115    |         |         |         |         |
116    |         |         |         |         |
117    |         |         |         |         |
118    |         |         |         |         |
119    |         |         |         |         |
120    |         |         |         |         |
121    |         |         |         |         |
122    |         |         |         |         |
123    |         |         |         |         |
124    |         |         |         |         |
125    |         |         |         |         |
126    |         |         |         |         |
127    |         |         |         |         |
128    |         |         |         |         |
129    |         |         |         |         |
130    |         |         |         |         |
131    |         |         |         |         |
132    |         |         |         |         |
133    |         |         |         |         |
134    |         |         |         |         |
135    |         |         |         |         |
136    |         |         |         |         |
137    |         |         |         |         |
138    |         |         |         |         |
139    |         |         |         |         |
140    |         |         |         |         |
141    |         |         |         |         |
142    |         |         |         |         |
143    |         |         |         |         |
144    |         |         |         |         |
145    |         |         |         |         |
146    |         |         |         |         |
147    |         |         |         |         |
148    |         |         |         |         |
149    |         |         |         |         |
150    |         |         |         |         |
151    |         |         |         |         |
152    |         |         |         |         |
153    |         |         |         |         |
154    |         |         |         |         |
155    |         |         |         |         |
156    |         |         |         |         |
157    |         |         |         |         |
158    |         |         |         |         |
159    |         |         |         |         |
160    |         |         |         |         |
161    |         |         |         |         |
162    |         |         |         |         |
163    |         |         |         |         |
164    |         |         |         |         |
165    |         |         |         |         |
166    |         |         |         |         |
167    |         |         |         |         |
168    |         |         |         |         |
169    |         |         |         |         |
170    |         |         |         |         |
171    |         |         |         |         |
172    |         |         |         |         |
173    |         |         |         |         |
174    |         |         |         |         |
175    |         |         |         |         |
176    |         |         |         |         |
177    |         |         |         |         |
178    |         |         |         |         |
179    |         |         |         |         |
180    |         |         |         |         |
181    |         |         |         |         |
182    |         |         |         |         |
183    |         |         |         |         |
184    |         |         |         |         |
185    |         |         |         |         |
186    |         |         |         |         |
187    |         |         |         |         |
188    |         |         |         |         |
189    |         |         |         |         |
190    |         |         |         |         |
191    |         |         |         |         |
192    |         |         |         |         |
193    |         |         |         |         |
194    |         |         |         |         |
195    |         |         |         |         |
196    |         |         |         |         |
197    |         |         |         |         |
198    |         |         |         |         |
199    |         |         |         |         |
200    |         |         |         |         |
201    |         |         |         |         |
202    |         |         |         |         |
203    |         |         |         |         |
204    |         |         |         |         |
205    |         |         |         |         |
206    |         |         |         |         |
207    |         |         |         |         |
208    |         |         |         |         |
209    |         |         |         |         |
210    |         |         |         |         |
211    |         |         |         |         |
212    |         |         |         |         |
213    |         |         |         |         |
214    |         |         |         |         |
215    |         |         |         |         |
216    |         |         |         |         |
217    |         |         |         |         |
218    |         |         |         |         |
219    |         |         |         |         |
220    |         |         |         |         |
221    |         |         |         |         |
222    |         |         |         |         |
223    |         |         |         |         |
224    |         |         |         |         |
225    |         |         |         |         |
226    |         |         |         |         |
227    |         |         |         |         |
228    |         |         |         |         |
229    |         |         |         |         |
230    |         |         |         |         |
231    |         |         |         |         |
232    |         |         |         |         |
233    |         |         |         |         |
234    |         |         |         |         |
235    |         |         |         |         |
236    |         |         |         |         |
237    |         |         |         |         |
238    |         |         |         |         |
239    |         |         |         |         |
240    |         |         |         |         |
241    |         |         |         |         |
242    |         |         |         |         |
243    |         |         |         |         |
244    |         |         |         |         |
245    |         |         |         |         |
246    |         |         |         |         |
247    |         |         |         |         |
248    |         |         |         |         |
249    |         |         |         |         |
250    |         |         |         |         |
251    |         |         |         |         |
252    |         |         |         |         |
253    |         |         |         |         |
254    |         |         |         |         |
255    |         |         |         |         |
256    |         |         |         |         |
257    |         |         |         |         |
258    |         |         |         |         |
259    |         |         |         |         |
260    |         |         |         |         |
261    |         |         |         |         |
262    |         |         |         |         |
263    |         |         |         |         |
264    |         |         |         |         |
265    |         |         |         |         |
266    |         |         |         |         |
267    |         |         |         |         |
268    |         |         |         |         |
269    |         |         |         |         |
270    |         |         |         |         |
271    |         |         |         |         |
272    |         |         |         |         |
273    |         |         |         |         |
274    |         |         |         |         |
275    |         |         |         |         |
276    |         |         |         |         |
277    |         |         |         |         |
278    |         |         |         |         |
279    |         |         |         |         |
280    |         |         |         |         |
281    |         |         |         |         |
282    |         |         |         |         |
283    |         |         |         |         |
284    |         |         |         |         |
285    |         |         |         |         |
286    |         |         |         |         |
287    |         |         |         |         |
288    |         |         |         |         |
289    |         |         |         |         |
290    |         |         |         |         |
291    |         |         |         |         |
292    |         |         |         |         |
293    |         |         |         |         |
294    |         |         |         |         |
295    |         |         |         |         |
296    |         |         |         |         |
297    |         |         |         |         |
298    |         |         |         |         |
299    |         |         |         |         |
300    |         |         |         |         |
301    |         |         |         |         |
302    |         |         |         |         |
303    |         |         |         |         |
304    |         |         |         |         |
305    |         |         |         |         |
306    |         |         |         |         |
307    |         |         |         |         |
308    |         |         |         |         |
309    |         |         |         |         |
310    |         |         |         |         |
311    |         |         |         |         |
312    |         |         |         |         |
313    |         |         |         |         |
314    |         |         |         |         |
315    |         |         |         |         |
316    |         |         |         |         |
317    |         |         |         |         |
318    |         |         |         |         |
319    |         |         |         |         |
320    |         |         |         |         |
321    |         |         |         |         |
322    |         |         |         |         |
323    |         |         |         |         |
324    |         |         |         |         |
325    |         |         |         |         |
326    |         |         |         |         |
327    |         |         |         |         |
328    |         |         |         |         |
329    |         |         |         |         |
330    |         |         |         |         |
331    |         |         |         |         |
332    |         |         |         |         |
333    |         |         |         |         |
334    |         |         |         |         |
335    |         |         |         |         |
336    |         |         |         |         |
337    |         |         |         |         |
338    |         |         |         |         |
339    |         |         |         |         |
340    |         |         |         |         |
341    |         |         |         |         |
342    |         |         |         |         |
343    |         |         |         |         |
344    |         |         |         |         |
345    |         |         |         |         |
346    |         |         |         |         |
347    |         |         |         |         |
348    |         |         |         |         |
349    |         |         |         |         |
350    |         |         |         |         |
351    |         |         |         |         |
352    |         |         |         |         |
353    |         |         |         |         |
354    |         |         |         |         |
355    |         |         |         |         |
356    |         |         |         |         |
357    |         |         |         |         |
358    |         |         |         |         |
359    |         |         |         |         |
360    |         |         |         |         |
361    |         |         |         |         |
362    |         |         |         |         |
363    |         |         |         |         |
364    |         |         |         |         |
365    |         |         |         |         |
366    |         |         |         |         |
367    |         |         |         |         |
368    |         |         |         |         |
369    |         |         |         |         |
370    |         |         |         |         |
371    |         |         |         |         |
372    |         |         |         |         |
373    |         |         |         |         |
374    |         |         |         |         |
375    |         |         |         |         |
376    |         |         |         |         |
377    |         |         |         |         |
378    |         |         |         |         |
379    |         |         |         |         |
380    |         |         |         |         |
381    |         |         |         |         |
382    |         |         |         |         |
383    |         |         |         |         |
384    |         |         |         |         |
385    |         |         |         |         |
386    |         |         |         |         |
387    |         |         |         |         |
388    |         |         |         |         |
389    |         |         |         |         |
390    |         |         |         |         |
391    |         |         |         |         |
392    |         |         |         |         |
393    |         |         |         |         |
394    |         |         |         |         |
395    |         |         |         |         |
396    |         |         |         |         |
397    |         |         |         |         |
398    |         |         |         |         |
399    |         |         |         |         |
400    |         |         |         |         |
401    |         |         |         |         |
402    |         |         |         |         |
403    |         |         |         |         |
404    |         |         |         |         |
405    |         |         |         |         |
406    |         |         |         |         |
407    |         |         |         |         |
408    |         |         |         |         |
409    |         |         |         |         |
410    |         |         |         |         |
411    |         |         |         |         |
412    |         |         |         |         |
413    |         |         |         |         |
414    |         |         |         |         |
415    |         |         |         |         |
416    |         |         |         |         |
417    |         |         |         |         |
418    |         |         |         |         |
419    |         |         |         |         |
420    |         |         |         |         |
421    |         |         |         |         |
422    |         |         |         |         |
423    |         |         |         |         |
424    |         |         |         |         |
425    |         |         |         |         |
426    |         |         |         |         |
427    |         |         |         |         |
428    |         |         |         |         |
429    |         |         |         |         |
430    |         |         |         |         |
431    |         |         |         |         |
432    |         |         |         |         |
433    |         |         |         |         |
434    |         |         |         |         |
435    |         |         |         |         |
436    |         |         |         |         |
437    |         |         |         |         |
438    |         |         |         |         |
439    |         |         |         |         |
440    |         |         |         |         |
441    |         |         |         |         |
442    |         |         |         |         |
443    |         |         |         |         |
444    |         |         |         |         |
445    |         |         |         |         |
446    |         |         |         |         |
447    |         |         |         |         |
448    |         |         |         |         |
449    |         |         |         |         |
450    |         |         |         |         |
451    |         |         |         |         |
452    |         |         |         |         |
453    |         |         |         |         |
454    |         |         |         |         |
455    |         |         |         |         |
456    |         |         |         |         |
457    |         |         |         |         |
458    |         |         |         |         |
459    |         |         |         |         |
460    |         |         |         |         |
461    |         |         |         |         |
462    |         |         |         |         |
463    |         |         |         |         |
464    |         |         |         |         |
465    |         |         |         |         |
466    |         |         |         |         |
467    |         |         |         |         |
468    |         |         |         |         |
469    |         |         |         |         |
470    |         |         |         |         |
471    |         |         |         |         |
472    |         |         |         |         |
473    |         |         |         |         |
474    |         |         |         |         |
475    |         |         |         |         |
476    |         |         |         |         |
477    |         |         |         |         |
478    |         |         |         |         |
479    |         |         |         |         |
480    |         |         |         |         |
481    |         |         |         |         |
482    |         |         |         |         |
483    |         |         |         |         |
484    |         |         |         |         |
485    |         |         |         |         |
486    |         |         |         |         |
487    |         |         |         |         |
488    |         |         |         |         |
489    |         |         |         |         |
490    |         |         |         |         |
491    |         |         |         |         |
492    |         |         |         |         |
493    |         |         |         |         |
494    |         |         |         |         |
495    |         |         |         |         |
496    |         |         |         |         |
497    |         |         |         |         |
498    |         |         |         |         |
499    |         |         |         |         |
500    |         |         |         |         |
501    |         |         |         |         |
502    |         |         |         |         |
503    |         |         |         |         |
504    |         |         |         |         |
505    |         |         |         |         |
506    |         |         |         |         |
507    |         |         |         |         |
508    |         |         |         |         |
509    |         |         |         |         |
510    |         |         |         |         |
511    |         |         |         |         |
512    |         |         |         |         |
513    |         |         |         |         |
514    |         |         |         |         |
515    |         |         |         |         |
516    |         |         |         |         |
517    |         |         |         |         |
518    |         |         |         |         |
519    |         |         |         |         |
520    |         |         |         |         |
521    |         |         |         |         |
522    |         |         |         |         |
523    |         |         |         |         |
524    |         |         |         |         |
525    |         |         |         |         |
526    |         |         |         |         |
527    |         |         |         |         |
528    |         |         |         |         |
529    |         |         |         |         |
530    |         |         |         |         |
531    |         |         |         |         |
532    |         |         |         |         |
533    |         |         |         |         |
534    |         |         |         |         |
535    |         |         |         |         |
536    |         |         |         |         |
537    |         |         |         |         |
538    |         |         |         |         |
539    |         |         |         |         |
540    |         |         |         |         |
541    |         |         |         |         |
542    |         |         |         |         |
543    |         |         |         |         |
544    |         |         |         |         |
545    |         |         |         |         |
546    |         |         |         |         |
547    |         |         |         |         |
548    |         |         |         |         |
549    |         |         |         |         |
550    |         |         |         |         |
551    |         |         |         |         |
552    |         |         |         |         |
553    |         |         |         |         |
554    |         |         |         |         |
555    |         |         |         |         |
556    |         |         |         |         |
557    |         |         |         |         |
558    |         |         |         |         |
559    |         |         |         |         |
560    |         |         |         |         |
561    |         |         |         |         |
562    |         |         |         |         |
563    |         |         |         |         |
564    |         |         |         |         |
565    |         |         |         |         |
566    |         |         |         |         |
567    |         |         |         |         |
568    |         |         |         |         |
569    |         |         |         |         |
570    |         |         |         |         |
571    |         |         |         |         |
572    |         |         |         |         |
573    |         |         |         |         |
574    |         |         |         |         |
575    |         |         |         |         |
576    |         |         |         |         |
577    |         |         |         |         |
578    |         |         |         |         |
579    |         |         |         |         |
580    |         |         |         |         |
581    |         |         |         |         |
582    |         |         |         |         |
583    |         |         |         |         |
584    |         |         |         |         |
585    |         |         |         |         |
586    |         |         |         |         |
587    |         |         |         |         |
588    |         |         |         |         |
589    |         |         |         |         |
590    |         |         |         |         |
591    |         |         |         |         |
592    |         |         |         |         |
593    |         |         |         |         |
594    |         |         |         |         |
595    |         |         |         |         |
596    |         |         |         |         |
597    |         |         |         |         |
598    |         |         |         |         |
599    |         |         |         |         |
600    |         |         |         |         |
601    |         |         |         |         |
602    |         |         |         |         |
603    |         |         |         |         |
604    |         |         |         |         |
605    |         |         |         |         |
606    |         |         |         |         |
607    |         |         |         |         |
608    |         |         |         |         |
609    |         |         |         |         |
610    |         |         |         |         |
611    |         |         |         |         |
612    |         |         |         |         |
613    |         |         |         |         |
614    |         |         |         |         |
615    |         |         |         |         |
616    |         |         |         |         |
617    |         |         |         |         |
618    |         |         |         |         |
619    |         |         |         |         |
620    |         |         |         |         |
621    |         |         |         |         |
622    |         |         |         |         |
623    |         |         |         |         |
624    |         |         |         |         |
625    |         |         |         |         |
626    |         |         |         |         |
627    |         |         |         |         |
628    |         |         |         |         |
629    |         |         |         |         |
630    |         |         |         |         |
631    |         |         |         |         |
632    |         |         |         |         |
633    |         |         |         |         |
634    |         |         |         |         |
635    |         |         |         |         |
636    |         |         |         |         |
637    |         |         |         |         |
638    |         |         |         |         |
639    |         |         |         |         |
640    |         |         |         |         |
641    |         |         |         |         |
642    |         |         |         |         |
643    |         |         |         |         |
644    |         |         |         |         |
645    |         |         |         |         |
646    |         |         |         |         |
647    |         |         |         |         |
648    |         |         |         |         |
649    |         |         |         |         |
650    |         |         |         |         |
651    |         |         |         |         |
652    |         |         |         |         |
653    |         |         |         |         |
654    |         |         |         |         |
655    |         |         |         |         |
656    |         |         |         |         |
657    |         |         |         |         |
658    |         |         |         |         |
659    |         |         |         |         |
660    |         |         |         |         |
661    |         |         |         |         |
662    |         |         |         |         |
663    |         |         |         |         |
664    |         |         |         |         |
665    |         |         |         |         |
666    |         |         |         |         |
667    |         |         |         |         |
668    |         |         |         |         |
669    |         |         |         |         |
670    |         |         |         |         |
671    |         |         |         |         |
672    |         |         |         |         |
673    |         |         |         |         |
674    |         |         |         |         |
675    |         |         |         |         |
676    |         |         |         |         |
677    |         |         |         |         |
678    |         |         |         |         |
679    |         |         |         |         |
680    |         |         |         |         |
681    |         |         |         |         |
682    |         |         |         |         |
683    |         |         |         |         |
684    |         |         |         |         |
685    |         |         |         |         |
686    |         |         |         |         |
687    |         |         |         |         |
688    |         |         |         |         |
689    |         |         |         |         |
690    |         |         |         |         |
691    |         |         |         |         |
692    |         |         |         |         |
693    |         |         |         |         |
694    |         |         |         |         |
695    |         |         |         |         |
696    |         |         |         |         |
697    |         |         |         |         |
698    |         |         |         |         |
699    |         |         |         |         |
700    |         |         |         |         |
701    |         |         |         |         |
702    |         |         |         |         |
703    |         |         |         |         |
704    |         |         |         |         |
705    |         |         |         |         |
706    |         |         |         |         |
707    |         |         |         |         |
708    |         |         |         |         |
709    |         |         |         |         |
710    |         |         |         |         |
711    |         |         |         |         |
712    |         |         |         |         |
713    |         |         |         |         |
714    |         |         |         |         |
715    |         |         |         |         |
716    |         |         |         |         |
717    |         |         |         |         |
718    |         |         |         |         |
719    |         |         |        
```

b) semval.c

```
D: > Projects > MZ727WOsGyak > MZ727W_0428 > C semval.c > ...
1  #include <stdio.h>
2  #include <sys/types.h>
3  #include <sys/ipc.h>
4  #include <sys/sem.h>
5  #define SEMKEY 123456L /* kulcs a semget-nek; remelem, egyedi */
6
7
8      int semid,nsems,rtn;
9      int semflg;
10     struct sembuf sembuf, *sop;
11     union semun arg;
12     int cmd;
13
14 int main()
15 {
16
17
18     nsems = 1;
19     semflg = 00666 | IPC_CREAT;
20     semid = semget (SEMKEY, nsems, semflg);
21     if (semid < 0 ) {perror(" semget hiba"); exit(0);}
22     else printf("\n semid: %d ",semid);
23     printf ("\n");
24
25     cmd = GETVAL; /* E parancsra a semctl visszaadja a currens
26     |         |         | semaphore erteket. Itt az rtn-be. */
27     rtn = semctl(semid,0, cmd, NULL);
28
29     printf("\n semval: %d ",rtn);
30     printf("\n");
31
32 }
```

c) semkill.c

```
D: > Projects > MZ727WOsGyak > MZ727W_0428 > C semkill.c > main()
1  #include <stdio.h>
2  #include <sys/types.h>
3  #include <sys/ipc.h>
4  #include <sys/sem.h>
5  #define SEMKEY 123456L /* kulcs a semget-nek; remelem, egyedi */
6
7
8      int semid,nsems,rtn;
9      int semflg;
10     struct sembuf sembuf, *sop;
11     union semun arg;
12     int cmd;
13
14 int main()
15 {
16
17
18     nsems = 1;
19     semflg = 00666 | IPC_CREAT;
20     semid = semget (SEMKEY, nsems, semflg);
21     if (semid < 0 ) {perror(" semget hiba"); exit(0);}
22     else printf("\n semid: %d ",semid);
23     printf ("\n");
24
25     cmd = IPC_RMID;      /* Ez a megszüntetés parancsa */
26     rtn = semctl(semid,0, cmd, arg);
27
28     printf("\n kill rtn: %d ",rtn);
29     printf("\n");
30
31 }
```

d) semup.c

```
D: > Projects > MZ727WOsGyak > MZ727W_0428 > C semup.c > main()
1  #include <stdio.h>
2  #include <sys/types.h>
3  #include <sys/ipc.h>
4  #include <sys/sem.h>
5  #define SEMKEY 123456L /* kulcs a semget-nek; remelem, egyedi */
6
7  int semid,nsems,rtn;
8  unsigned nsops;
9  int semflg;
10 struct sembuf sembuf, *sop;
11
12
13 int main()
14 {
15
16
17     nsems = 1; /* Egy semaphore legyen */
18     semflg = 0666 | IPC_CREAT;
19     semid = semget (SEMKEY, nsems, semflg);
20     if (semid < 0 ) {perror(" semget hiba"); exit(0);}
21     else printf("\n semid: %d ",semid);
22     printf ("\n");
23
24     nsops = 1; /* Egy operacio van */
25     sembuf.sem_num = 0; /* A 0-ik semaphor-ral foglakozunk */
26     sembuf.sem_op = 1; /* Inkrementaciót kerünk! */
27     sembuf.sem_flg = 0666; /* Flag beallitas */
28     sop = &sembuf; /* Így kéri a semop az argumentumot */
29     rtn = semop(semid, sop, nsops);
30     /* 0-val visszatérő semop sikeres. */
31     printf("\n up rtn: %d ",rtn);
32     printf("\n");
33
34 }
```