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1 // Program 1
2
3 #include <stdio.h>
4 #include <stdlib.h>
5
6 int main(void)
7 {
8     int i, j;
9     for(i = 0; i < 8; ++i)
10         for(j = 0; j < 8; ++j)
11             printf("i=%d, j=%d\n", i, j);
12     exit(0);
13 }
14
15 // Program 2
16
17 #include <stdio.h>
18 #include <stdlib.h>
19
20 int main(void)
21 {
22     int i, j;
23     for(i = 0; i < 8; i += 2)
24         for(j = 0; j < 8; j += 1)
25             printf("i=%d, j=%d\n", i, j);
26     exit(0);
27 }
28
29 // Program 3
30
31 #include <stdio.h>
32 #include <stdlib.h>
33
34 int main(void)
35 {
36     int i, j;
37     for(i = 0; i < 8; i += 3)
38         for(j = 0; j < 8; j += 2)
39             printf("i=%d, j=%d\n", i, j);
40     exit(0);
41 }
42
43 // Program 4
44
45 #include <stdio.h>
46 #include <stdlib.h>
47
48 int main(void)
49 {
50     int i, j;
51     for(i = 0; i < 8; i += 4)
52         for(j = 0; j < 8; j += 5)
53             printf("i=%d, j=%d\n", i, j);
54     exit(0);
55 }
56
57 // Program 5
58
59 #include <stdio.h>
60 #include <stdlib.h>
61
62 int main(void)
63 {
64     int i, j;
65     for(i = 0; i < 16; i += 2)
66         for(j = 1; j < 128; j *= 2)
67             printf("i=%d, j=%d\n", i, j);
68     exit(0);
69 }
70
71 // Program 6
72
73 #include <stdio.h>

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74  #include <stdlib.h>
75
76  int main(void)
77  {
78      int i, j;
79      for(i = 0; i < 16; i+= 3)
80          for(j = 0; j < 128; j *= 3)
81              printf("i=%d, j=%d\n", i, j);
82      exit(0);
83  }
84
85  // Program 7
86
87  #include <stdio.h>
88  #include <stdlib.h>
89
90  int main(void)
91  {
92      int i, j;
93      for(i = 0; i < 16; ++i)
94          for(j = 1; j < 128; j <= 2)
95              printf("i=%d, j=%d\n", i, j);
96      exit(0);
97  }
98
99  // Program 8
100
101  #include <stdio.h>
102  #include <stdlib.h>
103
104  int main(void)
105  {
106      int i, j;
107      for(i = 0; i < 16; ++i)
108          for(j = 1; j < 200; j <= 3)
109              printf("i=%d, j=%d\n", i, j);
110      exit(0);
111  }
112
113  // Program 9
114
115  #include <stdio.h>
116  #include <stdlib.h>
117
118  int main(void)
119  {
120      int i, j;
121      for(i = 1; i < 100; i <= 2)
122          for(j = 4; j < 256; j <= 3)
123              printf("i=%d, j=%d\n", i, j);
124      exit(0);
125  }
126
127  // Program 10
128
129  #include <stdio.h>
130  #include <stdlib.h>
131
132  int main(void)
133  {
134      int i, j;
135      for(i = 0; i < 8; ++i)
136          for(j = 8; j > 8; --j)
137              printf("i=%d, j=%d\n", i, j);
138      exit(0);
139  }
140
141  // Program 11
142
143  #include <stdio.h>
144  #include <stdlib.h>
145
146  int main(void)

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147 {
148     int i, j;
149     for(i = 0; i < 100; i = i * 2)
150         for(j = 100; j > 0; --j)
151             printf("i=%d, j=%d\n", i, j);
152     exit(0);
153 }
154
155
156 // Program 12
157
158 #include <stdio.h>
159 #include <stdlib.h>
160
161 int main(void)
162 {
163     int i, j;
164     for(i = 0; i < 100; i = i * 2)
165         for(j = 100; j >= 0; --j)
166             printf("i=%d, j=%d\n", i, j);
167     exit(0);
168 }
169
170 // Program 13
171
172 #include <stdio.h>
173 #include <stdlib.h>
174
175 int main(void)
176 {
177     int i, j;
178     for(i = 0; i < 8; ++i)
179         for(j = i; j < 8; ++j)
180             printf("i=%d, j=%d\n", i, j);
181     exit(0);
182 }
183
184 // Program 14
185
186 #include <stdio.h>
187 #include <stdlib.h>
188
189 int main(void)
190 {
191     int i, j;
192     for(i = 0; i < 8; ++i)
193         for(j = i; j <= 8; ++j)
194             printf("i=%d, j=%d\n", i, j);
195     exit(0);
196 }
197
198 // Program 15
199
200 #include <stdio.h>
201 #include <stdlib.h>
202
203 int main(void)
204 {
205     int i, j;
206     for(i = 0; i <= 8; ++i)
207         for(j = i; j < 8; ++j)
208             printf("i=%d, j=%d\n", i, j);
209     exit(0);
210 }
211
212 // Program 16
213
214 #include <stdio.h>
215 #include <stdlib.h>
216
217 int main(void)
218 {
219     int i, j;

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220     for(i = 0; i <= 8; ++i)
221         for(j = i; j <= 8; ++j)
222             printf("i=%d, j=%d\n", i, j);
223     exit(0);
224 }
225
226
227 // Program 17
228
229 #include <stdio.h>
230 #include <stdlib.h>
231
232 int main(void)
233 {
234     int i, j;
235     for(i = 0; i <= 8; ++i)
236         for(j = i+1; j <= 8; ++j)
237             printf("i=%d, j=%d\n", i, j);
238     exit(0);
239 }
240
241 // Program 18
242
243 #include <stdio.h>
244 #include <stdlib.h>
245
246 int main(void)
247 {
248     int i, j;
249     for(i = 0; i < 8; ++i)
250         for(j = i+1; j < 8; ++j)
251             printf("i=%d, j=%d\n", i, j);
252     exit(0);
253 }
254
255 // Program 19
256
257 #include <stdio.h>
258 #include <stdlib.h>
259
260 int main(void)
261 {
262     int i, j;
263     for(i = 0; i < 8; ++i)
264         for(j = 0; j < i; ++j)
265             printf("i=%d, j=%d\n", i, j);
266     exit(0);
267 }
268
269 // Program 20
270
271 #include <stdio.h>
272 #include <stdlib.h>
273
274 int main(void)
275 {
276     int i, j;
277     for(i = 0; i < 8; ++i)
278         for(j = 0; j <= i; ++j)
279             printf("i=%d, j=%d\n", i, j);
280     exit(0);
281 }
282
283 // Program 21
284
285 #include <stdio.h>
286 #include <stdlib.h>
287
288 int main(void)
289 {
290     int i, j;
291     for(i = 0; i < 8; ++i)
292         for(j = 8; j > i; --j)

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293         printf("i=%d, j=%d\n", i, j);
294     exit(0);
295 }
296
297 // Program 22
298
299 #include <stdio.h>
300 #include <stdlib.h>
301
302 int main(void)
303 {
304     int i, j;
305     for(i = 0; i < 8; ++i)
306         for(j = 8; j >= i; --j)
307             printf("i=%d, j=%d\n", i, j);
308     exit(0);
309 }
310
311 // Program 23
312
313 #include <stdio.h>
314 #include <stdlib.h>
315
316 int main(void)
317 {
318     int i, j;
319     for(i = 0; i <= 8; ++i)
320         for(j = 8; j > i; --j)
321             printf("i=%d, j=%d\n", i, j);
322     exit(0);
323 }
324
325 // Program 24
326
327 #include <stdio.h>
328 #include <stdlib.h>
329
330 int main(void)
331 {
332     int i, j;
333     for(i = 0; i <= 8; ++i)
334         for(j = 8; j >= i; --j)
335             printf("i=%d, j=%d\n", i, j);
336     exit(0);
337 }
338
339
340 // Program 25
341
342 #include <stdio.h>
343 #include <stdlib.h>
344
345 int main(void)
346 {
347     int i, j;
348     for(i = 8; i > 0; --i)
349         for(j = 0; j < i; ++j)
350             printf("i=%d, j=%d\n", i, j);
351     exit(0);
352 }
353
354 // Program 26
355
356 #include <stdio.h>
357 #include <stdlib.h>
358
359 int main(void)
360 {
361     int i, j;
362     for(i = 8; i > 0; --i)
363         for(j = 0; j <= i; ++j)
364             printf("i=%d, j=%d\n", i, j);
365     exit(0);

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366 }
367
368
369 // Program 27
370
371 #include <stdio.h>
372 #include <stdlib.h>
373
374 int main(void)
375 {
376     int i, j;
377     for(i = -5; i < 5; ++i)
378         for(j = -3; j < 3; ++j)
379             {
380                 if((i + j) < 0)
381                     puts("i + j less than 0");
382                 else if((i + j) == 0)
383                     puts("i + j equal to 0");
384                 else
385                     puts("i + j greater than 0");
386             }
387
388     exit(0);
389 }
390
391 // Program 28
392
393 #include <stdio.h>
394 #include <stdlib.h>
395
396 int main(void)
397 {
398     int i, j;
399     for(i = -5; i < 5; ++i)
400         for(j = -3; j < 3; ++j)
401             {
402                 if((i * j) < 0)
403                     puts("i * j less than 0");
404                 else if((i * j) == 0)
405                     puts("i * j equal to 0");
406                 else
407                     puts("i * j greater than 0");
408             }
409
410     exit(0);
411 }
412
413 // Program 29
414
415 #include <stdio.h>
416 #include <stdlib.h>
417
418 int main(void)
419 {
420     int i, j;
421     for(i = -5; i < 5; ++i)
422         for(j = -4; j <= 4; ++j)
423             {
424                 if((i * j) < 0)
425                     puts("i * j less than 0");
426                 else if((i * j) == 0)
427                     puts("i * j equal to 0");
428                 else
429                     puts("i * j greater than 0");
430             }
431
432     exit(0);
433 }
434
435 // Program 29
436
437 #include <stdio.h>
438 #include <stdlib.h>

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439
440 int main(void)
441 {
442     int i, j;
443     for(i = 8; i > 0; --i)
444         for(j = i - 1; j > 0; --j)
445             printf("i=%d, j=%d\n", i, j);
446
447     exit(0);
448 }
449
450 // Program 30
451
452 #include <stdio.h>
453 #include <stdlib.h>
454
455 int main(void)
456 {
457     int i, j;
458     for(i = 8; i >= 0; --i)
459         for(j = i - 1; j > 0; --j)
460             printf("i=%d, j=%d\n", i, j);
461
462     exit(0);
463 }
464
465 // Program 30
466
467 #include <stdio.h>
468 #include <stdlib.h>
469
470 int main(void)
471 {
472     int i, j;
473     for(i = 8; i > 0; --i)
474         for(j = i - 1; j >= 0; --j)
475             printf("i=%d, j=%d\n", i, j);
476
477     exit(0);
478 }
479
480 // Program 31
481
482 #include <stdio.h>
483 #include <stdlib.h>
484
485 int main(void)
486 {
487     int i, j;
488     for(i = 8; i >= 0; --i)
489         for(j = i - 1; j >= 0; --j)
490             printf("i=%d, j=%d\n", i, j);
491
492     exit(0);
493 }
494
495 // Program 32
496
497 #include <stdio.h>
498 #include <stdlib.h>
499
500 int main(void)
501 {
502     int i, j;
503     for(i = 8; i > 0; --i)
504         for(j = 0; j < 8; ++j)
505         {
506             if(i > j)
507                 printf("i=%d is greater than j=%d\n", i, j);
508             else if(i < j)
509                 printf("i=%d is less than j=%d\n", i, j);
510             else
511                 printf("i=%d is equal to j=%d\n", i, j);

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512     }
513
514     exit(0);
515 }
516
517 // Program 33
518
519 #include <stdio.h>
520 #include <stdlib.h>
521
522 int main(void)
523 {
524     int i, j;
525     for(i = 8; i >= 0; --i)
526         for(j = 0; j < 8; ++j)
527         {
528             if(i > j)
529                 printf("i=%d is greater than j=%d\n", i, j);
530             else if(i < j)
531                 printf("i=%d is less than j=%d\n", i, j);
532             else
533                 printf("i=%d is equal to j=%d\n", i, j);
534         }
535
536     exit(0);
537 }
538
539 // Program 34
540
541 #include <stdio.h>
542 #include <stdlib.h>
543
544 int main(void)
545 {
546     int i, j;
547     for(i = 8; i > 0; --i)
548         for(j = 0; j <= 8; ++j)
549         {
550             if(i > j)
551                 printf("i=%d is greater than j=%d\n", i, j);
552             else if(i < j)
553                 printf("i=%d is less than j=%d\n", i, j);
554             else
555                 printf("i=%d is equal to j=%d\n", i, j);
556         }
557
558     exit(0);
559 }
560
561 // Program 35
562
563 #include <stdio.h>
564 #include <stdlib.h>
565
566 int main(void)
567 {
568     int i, j;
569     for(i = 8; i >= 0; --i)
570         for(j = 0; j <= 8; ++j)
571         {
572             if(i > j)
573                 printf("i=%d is greater than j=%d\n", i, j);
574             else if(i < j)
575                 printf("i=%d is less than j=%d\n", i, j);
576             else
577                 printf("i=%d is equal to j=%d\n", i, j);
578         }
579
580     exit(0);
581 }

```