

**ENGINEERING H192  
PRELIMINARY ASSIGNMENT 12**

A program and a table with a partial "memory map" are shown below. The table includes the name of each variable in the program and its corresponding address in the computer's memory. The empty cells in the table are for the values stored in each variable at various points of execution: (1) before the program starts, (2) immediately after line 10 executes, (3) immediately after line 13 executes, and (4) immediately after line 19 executes.

Complete the program by filling in the blanks. The comment on each line indicates how the statement is to be completed. In addition, complete the table by filling in the value stored by each variable at the appropriate point of execution. **NOTE:** At some points prior to and during execution of the program the value stored by a variable is unknown. In those cases, please answer "unknown".

Variable	Address	Before	After 10	After 13	After 19
x1	1000				
x2	1004				
n1	2000				
n2	2004				
px	3000				
pn	3004				

```

1  int main ()
2  {
3      float x1, x2, *px;
4      int n1, n2 *pn;
5
6      x1 = 10.5;
7      n1 = 20;
8
9      px = _____; /* Assign the address of x1 to the pointer variable px*/
10     pn = _____; /* Assign the address of n1 to the pointer variable pn*/
11
12     x2 = _____; /* Assign the value in x1 to x2 using pointer px */
13     n2 = _____; /* Assign the value in n1 to n2 using pointer pn */
14
15     _____ = 7.5; /* Use pointer px to store 7.5 in x1 */
16     _____ = 15; /* Use pointer pn to store 15 in n1 */
17
18     px = &x2; /* Assign the address of x2 to the pointer variable px*/
19     pn = &n2; /* Assign the address of n2 to the pointer variable pn*/
20
21     return 0;
22 }

```

Name \_\_\_\_\_ Instr. \_\_\_\_\_ Room \_\_\_\_\_ Seat \_\_\_\_\_ Hour \_\_\_\_\_