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/* Pointer example ptr05.F2003.c - Pointer declarations, typing, dereferencing */
/* Also, what happens if wrong type assignment is attempted */
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```
#include <stdio.h>
```

```
main()
{
    int a = 7;
    double b = 3.4;

    int * c; /* points to locations holding an int */
    double * d; /* points to locations holding a double */

    printf("a contains %d\n", a);
    c = &a;
    printf("Contents of loc pointed to by c is %d\n", *c);

    c = &b; /* quincy: ptr05.c: 15: warning: assignment from incompatible
               pointer type */
    printf("Contents of loc pointed to by c is %d\n\n", *c); // print double with %d

    printf("b contains %lf\n", b);
    d = &b;
    printf("Contents of loc pointed to by d is %lf\n", *d);

    d = &a; /* quincy: ptr05.c: 24: warning: assignment from incompatible
               pointer type */
    printf("Contents of loc pointed to by d is %lf\n", *d); // print int with %lf
}
```

a contains 7

Contents of loc pointed to by c is 7

Contents of loc pointed to by c is 858993459 <=====

b contains 3.400000

Contents of loc pointed to by d is 3.400000

Contents of loc pointed to by d is 0.000000 <=====