

```
/* Pointer example ptr05.F2003.c - Pointer declarations, typing, dereferencing */
/* Also, what happens if wrong type assignment is attempted */
```

```
#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    <=====
```