

## Passing Data Types as Parameters

The syntax for passing a `apvector`, `apmatrix`, `apstack`, or `apqueue` as a parameter is:

```
void Input(apvector<int> & x);  
// post: fills the vector with ints  
  
void Input(apmatrix<double> & x);  
// post: fills the vector with doubles  
  
void Input(apstack<apvector> & x);  
// post: fills the stack with vectors  
  
void Show(const apqueue<bool> & x);  
// pre: queue is init
```

Passing data types to and from functions should be done either as a *reference* or *constant reference* parameter. We do not use *value* parameters because we do not want to take up storage in the stack in addition to the time it would take to copy the data.