

## Window manager program: sample program structure (for CS 241—Data Structures in Python):

```
class Window:
```

```
def __init__(...) (initializer)
```

```
# set instance variables
```

```
self.x = ... # position (upper left corner)  
self.y = ...
```

```
self.w = ... # size (width and height)  
self.h = ...
```

```
self.name = ... # for easy reference
```

```
def hit(...)
```

```
# did a click hit this window?  
# returns boolean
```

```
def __str__(...)
```

```
# describe this window  
# returns string
```

```
class WindowList:
```

```
def __init__(...) (initializer)
```

```
# set instance variable
```

```
self.wlist = [...,...] // the windows
```

```
def promote(...)
```

```
# given a click, bring a window to front:
```

- loop to find which window (calling hit);
- return null if no hit at all;
- stash the hit window;
- move other (front-more) windows down;
- restore hit window to front & return;

```
def __str__(...)
```

```
# describe this list of windows  
# returns string
```

See next page/other side  
for a sketch of the main  
WindowManager class