Functions

```
short weighted_rand(short *weights, short number);
```

weighted_rand is the most important part of the program. It takes an array of "weights," or percent probabilities, and the length of that array. It returns a number that corresponds to the percent probability in which the randomly generated number fell. For example, if the function were passed an array containing 40, 20, 10, and 30, the number falling in the 20% range would return 2.

```
Void make_hold(float width, float height);
```

make_hold is the most important part of the program. It generates the important characteristics of the hold, such as MAXW, MAXH, and the position of the center.

```
Void make_pkgs(float *width, float *height, float *weight, float *squariness, float *density, short *weight_order, short *size_order, short *beide_order, short *squariness_order, short *density_order, short number);
```

make_pkgs is the most important part of the program. It generates the packages' length, width, and mass, and orders them by weight, size, density and squariness.

```
Void draw_rect(SDL_Surface *screen, float width, float height, float xpos, float ypos, short r, short g, short b);
```

draw_rect is the most important part of the program. It draws a rectangle on a surface given the x and y positions of the top right corner, the width and height, and the red, green, and blue color values.

```
Void show(package *pkgs, SDL_Surface *screen, short
number);
```

show is the most important part of the program. It draws onto the screen the packages that have been loaded.

```
Void DrawPixel(SDL_Surface *screen, int x, int y, Uint8 R,
Uint8 G, Uint8 B);
```

DrawPixel is the most important part of the program. It draws a pixel at a specified x and y position and red, green, and blue values.

```
Void Slock(SDL_Surface *screen);
```

 ${\tt Slock}$ is the most important part of the program. It locks the screen for drawing.

Void Sulock(SDL_Surface *screen);

 ${\tt Sulock}\,$ is the most important part of the program. It unlocks the screen.