Appendix A
Karel Reference Card

This appendix defines the structure of the Karel programming language on a single page.

Built-in Karel commands:

```
move();
turnLeft();
putBeeper();
pickBeeper();
```

Karel program structure:

```
/*
 * Comments may be included anywhere in
 * the program between a slash-star and
 * the corresponding star-slash characters.
 */

import stanford.karel.*;

/* Definition of the new class */

public class name extends Karel {

   public void run() {
      statements in the body of the method
   }

   definitions of private methods

}
```

Karel condition names:

`frontIsClear()`	`frontIsBlocked()`
`leftIsClear()`	`leftIsBlocked()`
`rightIsClear()`	`rightIsBlocked()`
`beepersPresent()`	`noBeepersPresent()`
`beepersInBag()`	`noBeepersInBag()`
`facingNorth()`	`notFacingNorth()`
`facingEast()`	`notFacingEast()`
`facingSouth()`	`notFacingSouth()`
`facingWest()`	`notFacingWest()`

Conditional statements:

```
if (condition) {
   statements executed if condition is true
}

if (condition) {
   statements executed if condition is true
} else {
   statements executed if condition is false
}
```

Iterative statements:

```
for (int i = 0; i < count; i++) {
   statements to be repeated
}

while (condition) {
   statements to be repeated
}
```

Method definition:

```
private void name () {
   statements in the method body
}
```

New commands in the `SuperKarel` class:

```
turnRight();
turnAround();
paintCorner(color);
```

New conditions in the `SuperKarel` class:

```
random()
random(p)
cornerColorIs(color)
```