Functions Part 1 Challenge-The Karel Robot

Open this site.

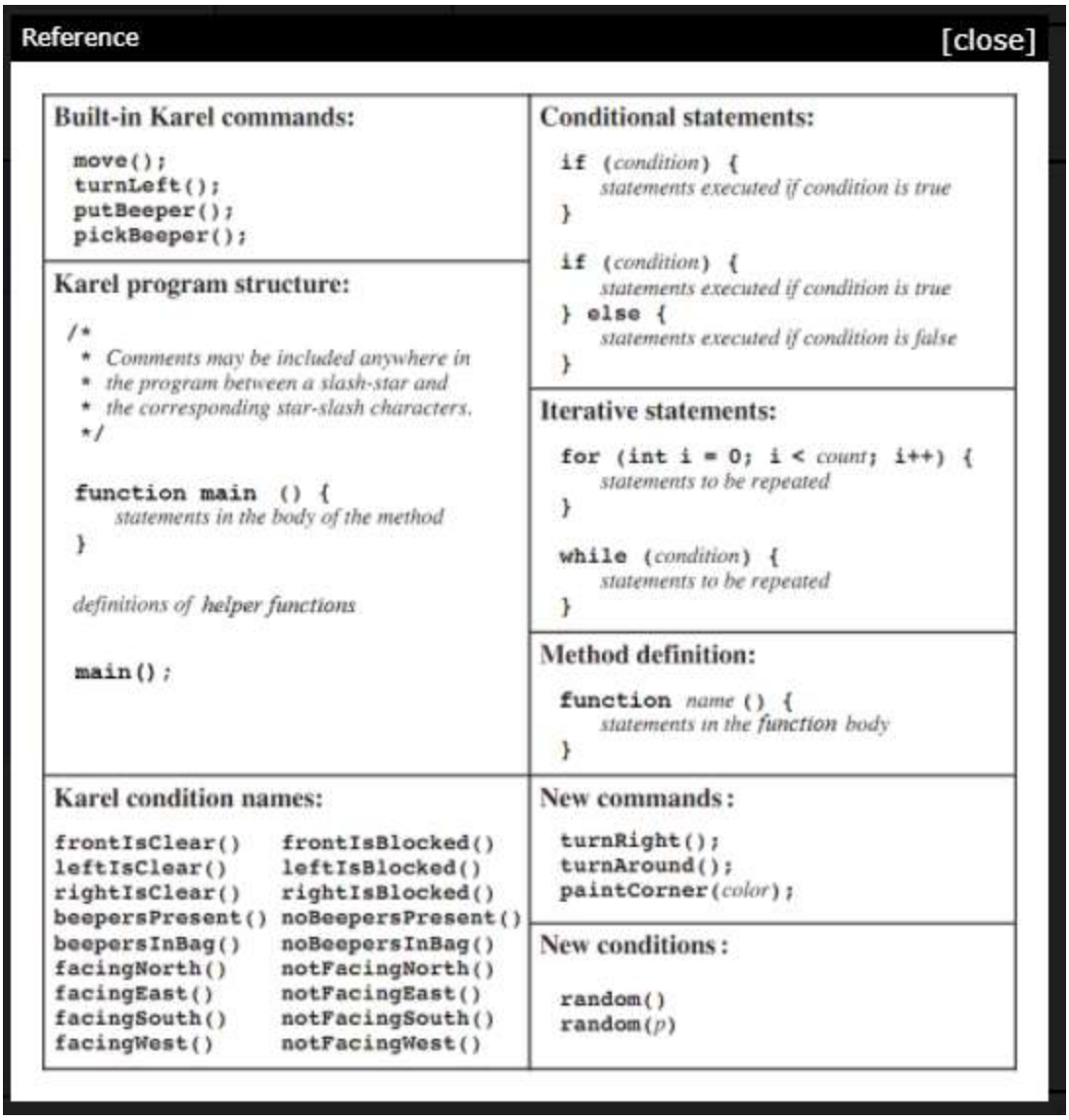
https://stanford.edu/~cpiech/karel/ide.html

set world 5x5

```
/**
 * Welcome to the Stanford Karel IDE.
 * This is a free space for you to
 * write any Karel program you want.
 **/
function main(){
  goInCircle();
  goInCircle();
}

//Function
function goInCircle(){
  move();
  turnLeft();
  move();
  turnLeft();
}

//See reference on right side top
```




```
/**
 * Welcome to the Stanford Karel IDE.
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 * write any Karel program you want.
 **/
function main(){
  moveFourTimes();
```
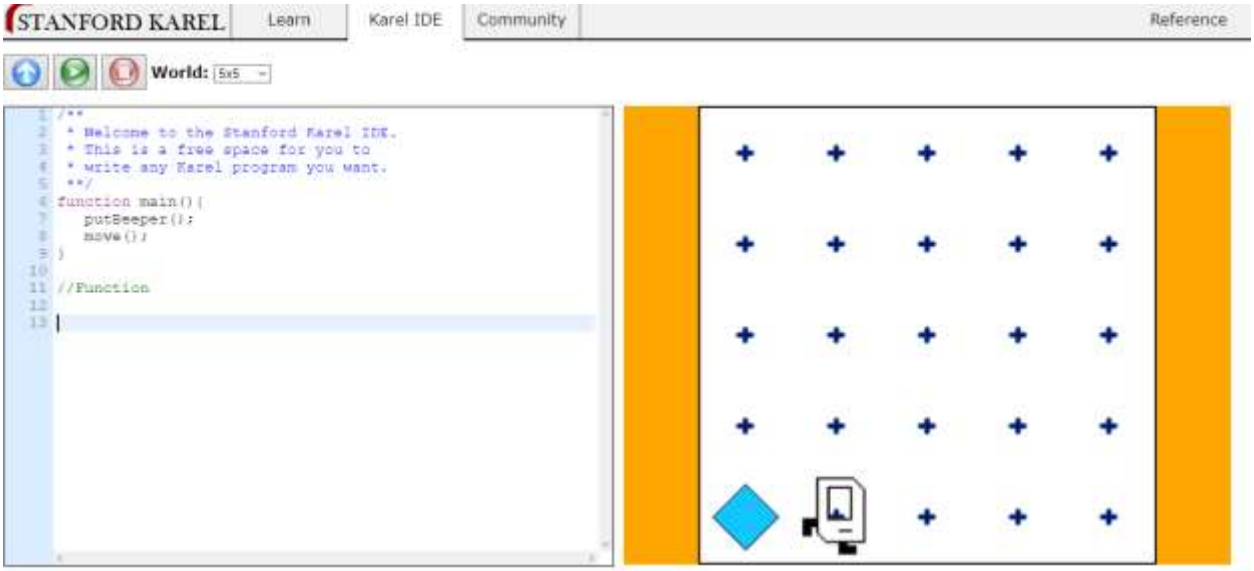

```
  turnLeft();
  moveFourTimes();
}

//Function
function moveFourTimes(){
  move();
  move();
  move();
  move();
}
```



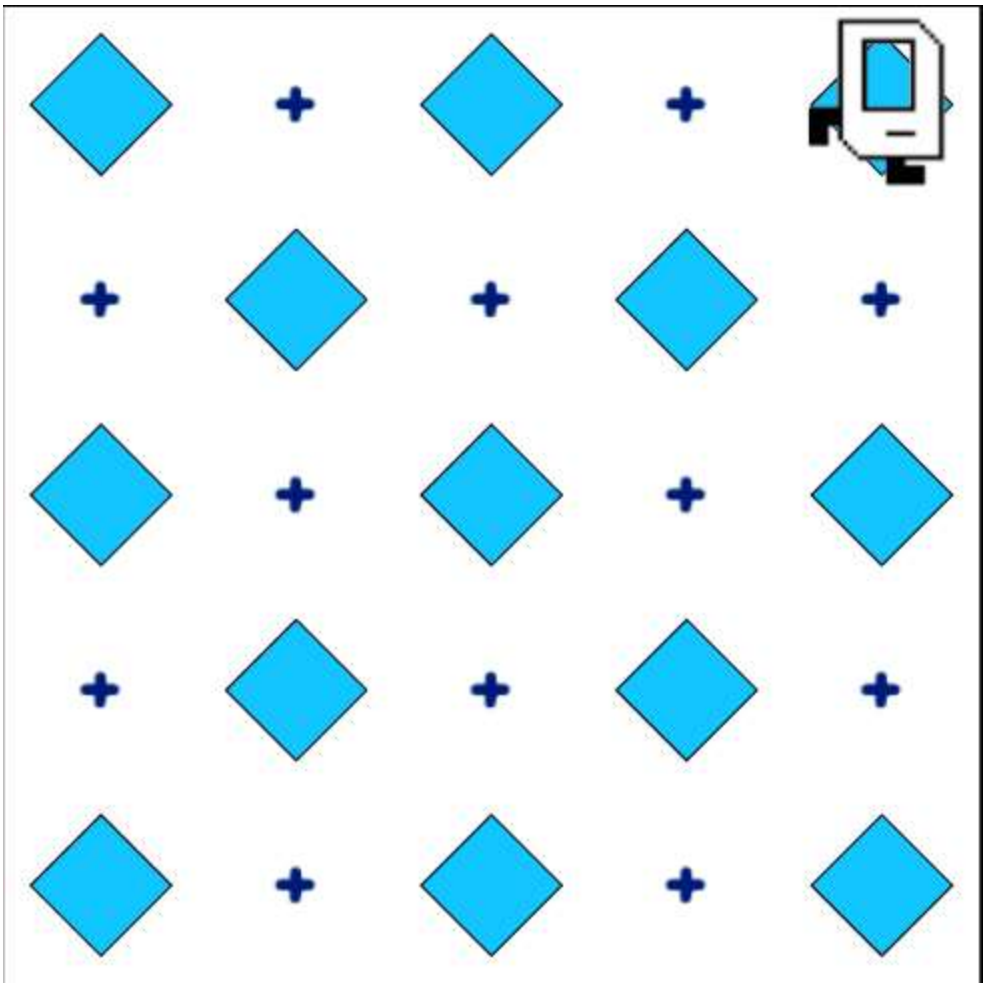

```
/**
 * Welcome to the Stanford Karel IDE.
 * This is a free space for you to
 * write any Karel program you want.
 **/
function main(){
  putBeeper();
```

```
  move();
}
```

```
/**
 * Welcome to the Stanford Karel IDE.
 * This is a free space for you to
 * write any Karel program you want.
 **/
function main(){
  diagonalMoveAndBeeper();
  diagonalMoveAndBeeper();
  diagonalMoveAndBeeper();
  diagonalMoveAndBeeper();
}

//Function
function diagonalMoveAndBeeper(){
  move();
  turnLeft();
  move();
  putBeeper();
  turnRight();
  }
```

```
/**
 * Welcome to the Stanford Karel IDE.
```

```
 * This is a free space for you to
 * write any Karel program you want.
 **/
function main(){
   putBeeper();
   diagonalMoveAndBeeper();
   diagonalMoveAndBeeper();
   diagonalMoveAndBeeper();
   diagonalMoveAndBeeper();
}

//Function
function diagonalMoveAndBeeper(){
   move();
   turnLeft();
   move();
   putBeeper();
   turnRight();
   }
```



Solve above challenge

Solution:

```
/**
 * Welcome to the Stanford Karel IDE.
 * This is a free space for you to
 * write any Karel program you want.
 **/
function main(){
   beepersRight();
   goUpTurnLeft();
   beepersLeft();
   goUpTurnRight();
```

```
    beepersRight();
  goUpTurnLeft();
  beepersLeft();
  goUpTurnRight();
    beepersRight();
}

function goUpTurnRight() {
  turnRight();
  move();
  turnRight();
}

function goUpTurnLeft() {
  turnLeft();
  move();
  turnLeft();
}

function beepersRight() {
  putBeeper();
  move();
  move();
  putBeeper();
  move();
  move();
  putBeeper();
}
```

```
function beepersLeft() {
   move();
   putBeeper();
   move();
   move();
   putBeeper();
   move();
}
```