Name _____ Period _____

Skill 30.01 Exercises 1 thru 3

Basic If-Statements

```
MOVE_FORWARD

IF (CAN_MOVE forward)

    MOVE_FORWARD

ELSE

    ROTATE_LEFT
    MOVE_FORWARD
    ROTATE_RIGHT
    MOVE_FORWARD

MOVE_FORWARD
```
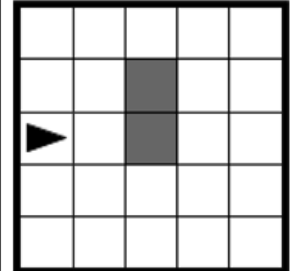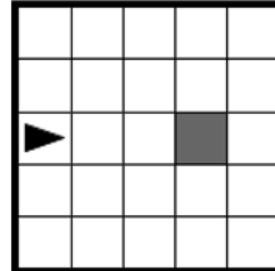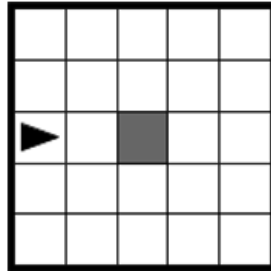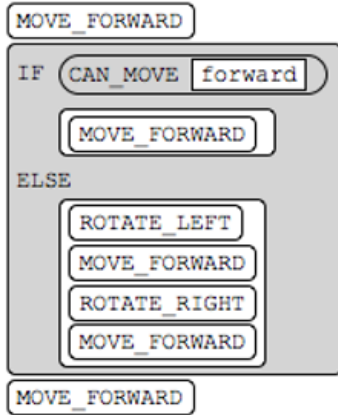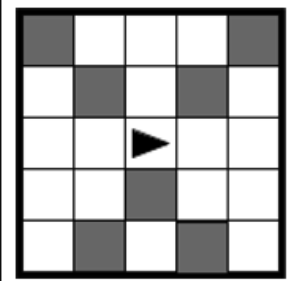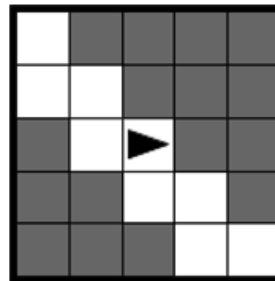
```
IF (CAN_MOVE (left))
{
  ROTATE_LEFT ()
  MOVE_FORWARD ()
}
ELSE
{
  ROTATE_RIGHT()
  MOVE_FORWARD ()
}
IF (CAN_MOVE (right))
{
  ROTATE_RIGHT ()
}
ELSE
{
  ROTATE_LEFT ()
}
MOVE_FORWARD ()
```
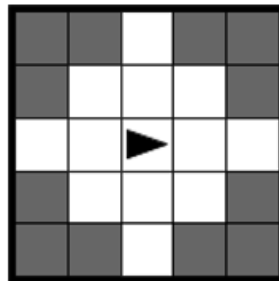
Nested If-Else Statements

Name _____ Period _____

```
IF (CAN_MOVE (forward))
{
  IF (CAN_MOVE (left))
  {
    ROTATE_LEFT ()
  }
  ELSE{
    ROTATE_RIGHT ()
}
  MOVE_FORWARD ()
}
ELSE
{
  ROTATE_LEFT ()
  ROTATE_LEFT ()
}
MOVE_FORWARD ()
```
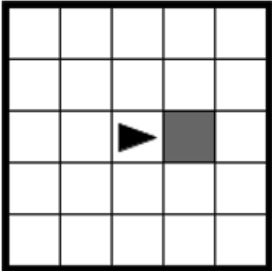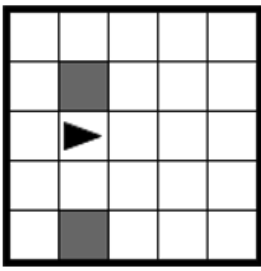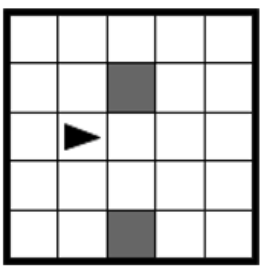
| **Skill 30.02 Exercise 1** |
| Below is the start of a program. Write an if-else statement that checks whether or not someone is old enough to drive. If they are 16 or older, indicate to the user that they are old enough to drive. Otherwise, indicate to the user how long they need to wait until they can drive. |
| `var age = prompt("What is your age");` |

AP Computer Science Principles
Ticket Out the Door
Set 30: If-Else Statements

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Skill 30.02 Exercise 2

Consider the following students and their corresponding gpa's. Notice their rank is out of order! Write a program that puts the students in the correct order – include else statements this time. The gpa and rank of each student can be accessed using the following syntax: Bart.gpa, Bart.rank

	gpa	rank
var Bart	3.5	1
var Bugs	3.8	3
var Kyle	3.1	2

Name _____ Period _____

Skill 30.03 Exercise 1

Consider the prompt below. Write code that could be used to indicate the grade received on the quiz.

```
var score = promptNum("What was your quiz score (0-100)?");

console.log("Your quiz grade is an A");
console.log("Your quiz grade is a B");
console.log("Your quiz grade is a C");
console.log("Your quiz grade is a D");
console.log("Your quiz grade is an F");
```