**18. Bodies**

# Program Name: Bodies.java Input File: bodies.dat

Mr. A has just killed somebody. He has tasked his butler, Tristan Weaselpopsicle, to dispose of the body at night. Mr. A has already identified possible sites to dispose of the body, but there are police officers who roam around, so Butler Weaselpopsicle must by very stealthy. Write a program to see if Tristan can dispose of the body without being caught by the police. Tristan can move in the four cardinal directions (north, west, south, east), but not diagonally.

**Input**

The first line represents the number of data sets to follow. In each data set the first line contains the rows and columns of the map, respectively. The next r lines will contain the map. The T represents where Tristan starts. There can be 1 to 3 S’s, which represents possible sites to dispose of the body. There can be 0 to 3 P’s, which represent police officers. Tristan can travel in any square except one space around a police officer, including diagonals, or a wall, denoted by a #. You can assume Tristan’s starting position won’t be right next to a police officer, but a possible site could be right next to a police officer, making it automatically inaccessible.

**Output**

Always output “Bravo Six Going Dark...” to signify that Tristan has started his night time mission. If it is possible for Tristan to dispose of the body without getting caught, output “at the end of the tunnel is a light” on the same line. Otherwise output “Mission Failed. We’ll get em next time.”

**Example Input File**

2

6 7

.S.####

.#P..##

T.##P##

...#..S

#....##

#####S.

5 5

.....

....S

..P.#

..#.#

T...#

**Example Output to Screen**

Bravo Six Going Dark... Mission Failed. We'll get em next time.

Bravo Six Going Dark... at the end of the tunnel is a light.