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Introduction to Programming

Assignment: Task 1

The Problem

You should write a program that simulates a Bridge-Keeper charged with guarding an important bridge from those on a quest.

The Bridge-Keeper is approached by any Knight wishing to cross the bridge. He then asks three questions and, if the answers are correct, he allows the Knight to cross. Any wrong answer means that the Knight is cast immediately into the Gorge of Eternal Peril.

Should the King approach, he is allowed to pass as soon as he announces his name.

The three questions are:

- What is your name?
- What do you seek?
- What is your favourite colour?

The correct answers are:

- Any name, but the King (Arthur) is allowed to pass without any further questions.
- The Grail (any response with "grail" in it is acceptable).
- Any colour that begins with the same letter as the Knight's name. (The Bridge-Keeper does not check that the answer actually is a colour.)

Examples

The following illustrate what should happen when the program executes for a variety of answers.

Here, the King (Arthur) is allowed to pass:

```
Stop! Who would cross the Bridge of Death
Must answer me these questions three, 'ere the other side he see.
What is your name? Arthur
My liege! You may pass!
```

Now, it is not the king, but the Knight follows the wrong quest:

```
Stop! Who would cross the Bridge of Death
Must answer me these questions three, 'ere the other side he see.

What is your name? Robin
What is your quest? I seek the hand grenade.
Only those who seek the Grail may pass.
```

This Knight is on the correct quest, but does not know his favourite colour.

```
Stop! Who would cross the Bridge of Death
Must answer me these questions three, 'ere the other side he see.

What is your name? Galahad
What is your quest? I seek the grail!
What is your favourite colour? Blue
Incorrect! You must now face the Gorge of Eternal Peril.
```

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Finally, this Knight is allowed to pass.

```
Stop! Who would cross the Bridge of Death
Must answer me these questions three, 'ere the other side he see.

What is your name? Lancelot of Camelot
What is your quest? I seek the Grail!
What is your favourite colour? Lemon yellow.
You may pass!
```

Reference

Monty Python - Bridge of Death

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