The Department of Computer Science & CINSAM

NKU Summer Computing Workshop 2015



Project 2:

Part 1: Question answering game

Write a program to ask the user a series of questions and input their answers. Limit your questions to those that permit one-word answers like "What state is the capital of Kentucky?" or "How many different people have walked on the moon?" After you have input the user's answer, test to see if they got the answer correctly and if so, add a point to their score. At the end of the game, output their score. To test to see if they got the answer right, you will need to use an if statement like this:

```
if(stateAnswer.equals("Frankfort")) score++;
or
  if(moonAnswer==10)) score++;
```

Notice how the String answer is tested using string.equals("answer") while the numeric comparison answer==number. You can ask real trivia questions or questions about people you know. You can make questions worth different points. For instance, if the Frankfort question is harder than others, make it worth 2 or 3 points, changing score++; to be score=score+3; or score+=3; You can also have multiple answers using an if-else structure like this:

```
if(userAnswer.equals("answer 1")) score+=5;
else if(userAnswer.equals("answer 2")) score+=2;
else score--;
```

Here, you add 5 points for answer 1, 2 points for answer 2, and deduct a point for any other answer. Write your game to have about 10 questions.

Part 2: Dice rolling game

Write a game in which you roll a series of dice for the user and for the computer and add up the results and see who wins. Before the game starts, ask the user which to roll: 6 4-sided dice, 4 6-sided dice, or 2 12-sided dice. The computer will randomly pick which type of dice to use as well. Use logic similar to what is shown below.

Use if statements to roll the proper dice as in:

```
/* input user's choice of 4, 6 or 12, store in userPick */
if(userPick==4){
     roll1 = (g.nextInt(4)+1); roll2 = (g.nextInt(4)+1);
     roll3 = (g.nextInt(4)+1);
                               roll4 = (q.nextInt(4)+1);
     roll5 = (q.nextInt(4)+1); roll6 = (q.nextInt(4)+1);
     total=roll1+roll2+roll3+roll4+roll5+roll6;
}
else if(userPick==6) { /* generate 4 rolls of 6 sided dice */ }
                                   rolls
                                               12
      {/*
            generate
                          random
                                           of
                                                    sided
                                                            dice
System.out.println(...);
                         /* output the total of the rolls */
/* do something similar for the computer but randomly pick 0, 1 or 2
for each of the 4-sided, 6-sided or 12-sided die.
                                                            Store
computer's rolls in total2. Finally, compare total and total2 to see
who won */
```