**Question\_01**

For this question assume that there is an int variable called num used to hold the numerical value for the number weapons IronMan carries. Write a print statement that would produce the following output .

IronMan has 45 kinds of weapons in his suit.

Int num = 45;

System.out.println(“IronMan has ” + num + “ kinds of weapons in his suit.”);

**Question\_02**

Given the following variables...

String pres = "Abraham Lincoln";

String quote = "Whatever you are, be a good one.";

Write a print statement that produces ***exactly*** the following output:

Abraham Lincoln once said, "Whatever you are, be a good one."

System.out.println(pres + “ once said, \“” + quote + “\””);

**Question\_03**

Given the following variables…

int h = 45;

int w = 64;

Write a print statement that produces ***exactly*** the following output:

The area of your rectangle is...2880

int area = h \* w;

System.out.println(“The area of your rectangle is…” + area);

**Question\_04**

Consider the code below

System.out.println("How many pieces of pizza do you want? ");

int slices = kb.nextInt();

System.out.println(slices + "slices, coming right up!");

Why would it cause an error if the user enters “seven” instead of 7?

Because kb is looking for an integer, not a string.

**Question\_05**

Consider the following lines of code

Scanner kb = new Scanner(System.in);

System.out.println("What is your name? ");

String answer = kb.next();

System.out.println("Is there a Mr. or Mrs. " + answer + "?");

Now consider that the user has entered the following

What is your name?

>> Buster Brown

What would be the final output as the last print statement runs?

1. Is there a Mr. or Mrs. Brown?
2. Is there a Mr. or Mrs. Buster Brown?
3. Is there a Mr. or Mrs. Buster?
4. The final print statement prints nothing
5. The final print statement produces an error

**Question\_06**

Consider the following code.

//Scanner is imported...

Scanner keyboard = new Scanner(System.in);

System.out.println("How many siblings do you have? ");

int answer1 = kb.nextInt();

System.out.println("What are their names? ");

String answer2 = kb.nextLine();

System.out.println("OK, which one is your favorite?");

String answer3 = kb.nextLine();

System.out.println("Awe! " + answer3 + " is your favorite.");

Which one of the following for examples is the most likely output of the program above?

|  |  |
| --- | --- |
| a.  b.  c.  d. | How many siblings do you have?  >> 3  What are their names?  OK, which one is your favorite?  >> Carl  Awe! Carl is your favorite.  How many siblings do you have?  >> 3  What are their names?  >> Gabby, Maddy, Carl  OK, which one is your favorite?  >> Carl  Awe! is your favorite.  How many siblings do you have?  >> 3  What are their names?  >> Gabby, Maddy, Carl  How many siblings do you have?  >> 3  → The program produces an error after the first input |

**Question\_07**

The following code produces an error.

System.out.println("R. Kelly said "I believe I can fly!"");

What is wrong and what can you do to fix this?

The quotes used are causing an error. To fix this you would use a back slash:

System.out.println(“R. Kelly said \”I believe I can fly!\””);

**Question\_08**

Consider the following lines of text

This one goes on top

This one goes on bottom

Write a ***single*** print statement that prints the text above.

System.out.println(“This one goes on top” + “\n” + “This one goes on bottom”);

**Question\_09**

Write a ***single*** print statement that prints the following text.

a b c

d e f

g h i

System.out.println(“a b c” + “\n” + “d e f” + “\n” +

“g h i”);

**Question\_10**

The following code is supposed to calculate a student’s GPA based on the percentage scores from 5 classes.

Scanner kb = new Scanner(System.in);

System.out.println("Please enter your Math grade: ");

int math = kb.nextInt();

System.out.println("Please enter your Science grade: ");

int science = kb.nextInt();

System.out.println("Please enter your English grade: ");

int english = kb.nextInt();

System.out.println("Please enter your History grade: ");

int history = kb.nextInt();

System.out.println("Please enter your COMPSCI grade: ");

int compsci = kb.nextInt();

int gpa = (math + science + english + history + compsci)/500;

System.out.println(gpa);

The program seems to run correctly, but produces GPA of “0” no matter what the grades are. What is wrong with the program and what can you do to fix it?

It’s because gpa is an integer and not a double.

To fix this you’d change the data type from int to double.

double gpa = (math + science + english + history + compsci)/500;