

1. Identify and fix the errors in the following code:

```
1 public class Test {  
2     public void main(string[] args) {  
3         int i;  
4         int k = 100.0;  
5         int j = i + 1;  
6  
7         System.out.println("j is " + j + " and  
8             k is " + k);  
9     }  
10 }
```

i has no value assigned to it.

2. How do you write a statement to let the user enter an integer or a double value from the keyboard?

Scanner scan = new Scanner(System.in);

3. What happens if you entered "5a" when executing the following code?

```
double radius = input.nextDouble();
```

4. Which of the following identifiers (variable names) are valid? Which are Java keywords (reserved words)?

miles
Test
a++
a--
4#R
\$4
#44
apps
class
public
int
x
y
radius

5. What is printed by the following line of code:

```
System.out.println(x = 5);
```

6. What are the benefits of using constants?

7. Declare an `int` constant `SIZE` with value 20.

8. What are the naming conventions for class names, methods names, constants, and variables?

9. Which of the following items can be a constant, a method, a variable, or a class according to the Java naming conventions?

```
MAX_VALUE  
Test  
read  
readInt
```