Answer questions 1-17 based on the following code:

A.   // TODO
B.   public class Hotdog
C.   {
D.       // instance variable
E.       private double length;
F.   public String condiment;
G.   
H.   I.       // TODO
J.   public Hotdog(double d,String s)
K.   {
L.       // TODO
M.   }
N.   
O.   // Cooking reduces length
P.   public double cook()
Q.   {
R.       length = length * 0.8;
S.   }
T.   U.       // How long is it?
V.   public double getLength()
W.   {
X.       // TODO
Y.   }
Z.   // How long should it be?
AA.   public double setLength(double d)
BB.   {
CC.       // TODO
DD.   }
EE.   
FF.   
GG.   public class Nathan
HH.   {
II.   Hotdog Coney;
JJ.   Hotdog Braut;
KK.   public static void main(String [] args)
LL.   {
MM.       //TODO make a Coney and a Braut
NN.       //TODO cook a Braut
OO.       //TODO print out Braut length
PP.   }
QQ.   }
RR.   
1. What does the line of code labeled A indicate:

2. What does the line of code labeled B indicate:

3. What does the line of code labeled C indicate:

4. What does the line of code labeled D indicate:

5. What does the line of code labeled E indicate:

6. What does the line of code labeled F indicate:

7. What does the line of code labeled I indicate:

8. What does the line of code labeled J indicate:

9. What does the line of code labeled K indicate:

10. What does the line of code labeled L indicate:

11. What does the line of code labeled O indicate:

12. What does the line of code labeled P indicate:

13. What does the line of code labeled R indicate:

14. What does the line of code labeled V indicate:

15. What does the line of code labeled AA indicate:

16. What does the line of code labeled GG indicate:
17. What does the line of code labeled **II** indicate:

18. What does the line of code labeled **KK** indicate:

19. What code should replace **L**:

20. What code should replace **X**:

21. What code should replace **CC**:

22. What code should replace **MM**:

23. What code should replace **NN**:

24. What code should replace **OO**:

**Assume**

```java
int n;
boolean b,c,d;
double x,y;
string S,T;
```

25. Write a line of code that assigns to **n** a value.

26. Write a line of code that assigns to **x** a value.

27. Write a line of code that assigns to **S** a value.

28. Write a line of code that assigns to **b** a value.

29. Write a line of code that assigns to **b** the result of testing if **x** is less than **42**:
30. Write a line of code that assigns to `b` the result of testing if `x` is equal to 42:

31. Write a line of code that assigns to `b` the result of `c or d`:

32. Write a line of code that assigns to `b` the result of `c and not d`:

33. Write code that will set `x` to 0.0 if `n` equals 65 and will set `x` to 42.0 otherwise?

34. If we run the line of code `System.out.println(22/4);` what will the computer print out?

35. If we run the line of code `System.out.println(22.0/4.0);` what will the computer print out?

36. If we run the line of code `System.out.println(22.0/4);` what will the computer print out?

37. If we run the line of code `System.out.println("22" + 4);` what will the computer print out?

38. If we run the line of code `System.out.println(22+4/5);` what will the computer print out?

39. What is the difference in JAVA code between '7' and "7" and 7?

40. In JAVA, what is a class?
41. In JAVA, what is an object?

42. In JAVA, what is a method?

43. In JAVA, what is a field?

44. In JAVA, what is a constructor and what does it do?

45. What is an accessor?

46. What is a mutator?

47. Write an expression to compute and store the average of the double values \(x, y,\) and \(z\).

48. What are the three most important things to remember when creating a loop?

49. Write a \texttt{for} loop that prints out your name exactly five times.
   Answer:

50. Write a \texttt{while} loop that prints out your name exactly five times.
   Answer: