Code Tracing: Assignment Statement

Given the following code:

double x, y, z;
Human persona, role, part;
x = 3.1;
y = 4.2;
z = z;
persona = new Human("Leslie");
role = new Human("Frye");
part = persona;
// LOCATION 1
\[ x = 3.1 \]
\[ y = 4.2 \]
\[ z = z \]
persona.setName("Hermes");
// LOCATION 2
\[ x = 3.1 \]
persona = new Human("Frye");
// LOCATION 3
\[ z = z \]
role = persona;
// LOCATION 4
persona = new Human("Frye");
// LOCATION 5
System.out.println("personas.getName()");
// LOCATION 6
System.out.println(persona.getName());
System.out.println(persona.getAge());
// LOCATION 7
System.out.println(persona.getPart());

What is printed out?

Console window:

Memory diagram when execution reaches LOCATION 1

\[ x = 3.1 \]
\[ y = 4.2 \]
\[ z = z \]
persona
role
part

What is printed out?

Console window:

Memory diagram when execution reaches LOCATION 2

\[ x = 3.1 \]
\[ y = 4.2 \]
\[ z = z \]
persona
role
part

What is printed out?

Console window:

Memory diagram when execution reaches LOCATION 3

\[ x = 3.1 \]
\[ y = 4.2 \]
\[ z = z \]
persona
role
part

What is printed out?

Console window:

Memory diagram when execution reaches LOCATION 4

\[ x = 3.1 \]
\[ y = 4.2 \]
\[ z = z \]
persona
role
part
Code Tracing: Assignment Statement

Given the following code

double x, y, z;
Human persona, role, part;
x = 3.1;
y = 6.2;
z = x;
persona = new Human("Leea");
role = new Human("Fyu");
part = persona;
// LOCATION 1
x = 8.2;
y = z;
persona.setName("Hernaa");
// LOCATION 2
persona = new Human("Amy");
// LOCATION 3
role = persona;
// LOCATION 4
persona.hbBirthday();
// LOCATION 5
System.out.println(x);
System.out.println(y);
System.out.println(z);
System.out.println(persona.getName());
System.out.println(role.getAge());
System.out.println(part.getName());

What is printed out?

Console window:

8.2
6.2
3.1
Amy
Hernaa

Memory diagram when execution reaches

LOCATION 5