Exercises 1

1. Create a constant called age1 and set it equal to 42. Create another constant called age2 and set it equal to 21. Check that the type for both constants has been inferred correctly as int by hovering your mouse pointer over the variable names in VS Code.
2. Create a constant called averageAge and set it equal to the average of age1 and age2 using the operation (age1 + age2) / 2. Hover your mouse pointer over averageAge to check the type. Then check the result of averageAge. Why is it a double if the components are all int?

when you perform division in Dart, even if the operands are integers, the result will be a double if it's not a whole number. In this case, (age1 + age2) / 2 results in 31.5, which is a fractional value. Therefore, averageAge is inferred as a double.

If you want to calculate the average as an integer, you can use integer division (~/) instead of the division operator

Exercises 2

1. Create a string constant called firstName and initialize it to your first name. Also create a string constant called lastName and initialize it to your last name.
2. Create a string constant called fullName by adding the firstName and lastName constants together, separated by a space.
3. Using interpolation, create a string constant called myDetails that uses the fullName constant to create a string introducing yourself. For example, Ray Wenderlich's string would read: Hello, my name is Ray Wenderlich.

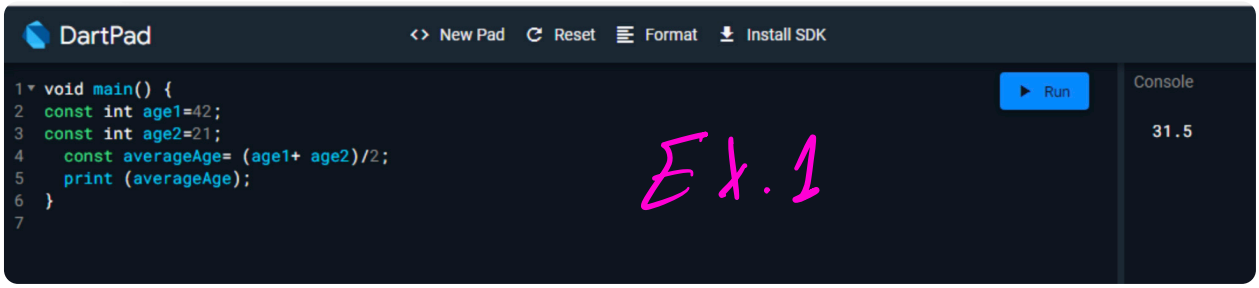
Exercises 3

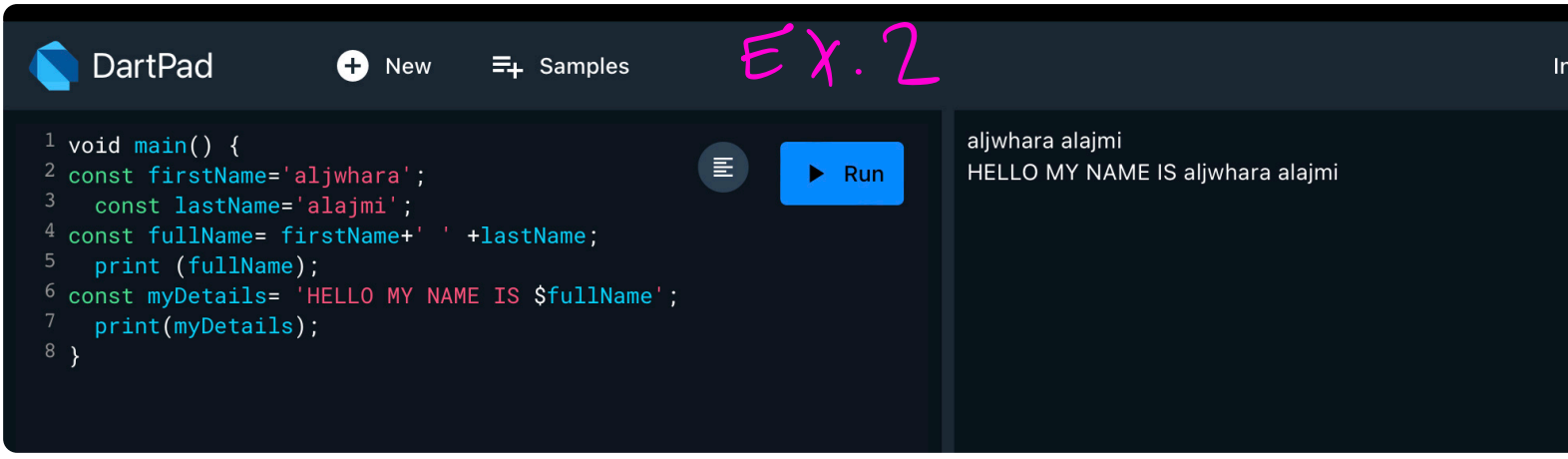
1. Create a constant called myAge and set it to your age. Then, create a constant named isTeenager that uses Boolean logic to determine if the age denotes someone in the age range of 13 to 19.
2. Create another constant named maryAge and set it to 30. Then, create a constant named bothTeenagers that uses Boolean logic to determine if both you and Mary are teenagers.
3. Create a String constant named reader and set it to your name. Create another String constant named ray and set it to 'Ray Wenderlich'. Create a Boolean constant named rayIsReader that uses string equality to determine if reader

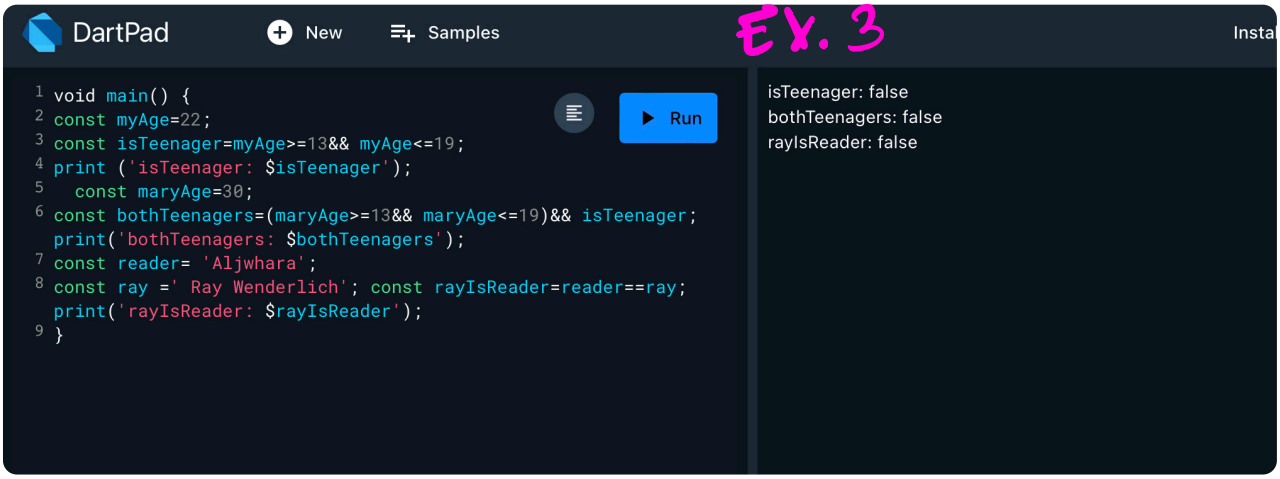
and ray are equal. Now that you understand Boolean logic, you're going to use that knowledge to make decisions in your code.

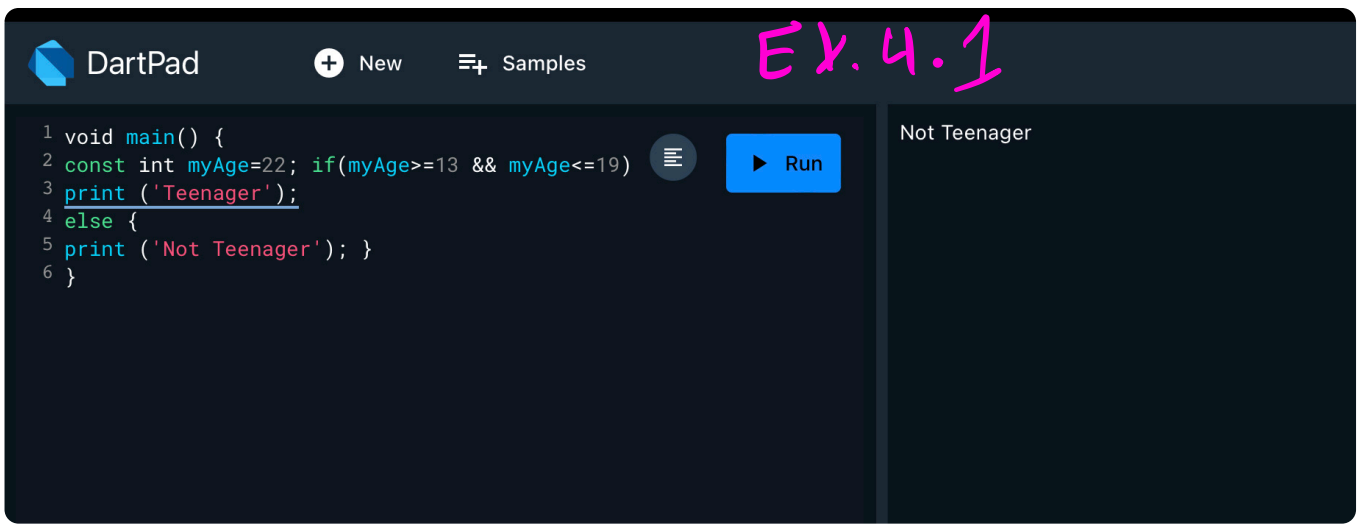
Exercises 4

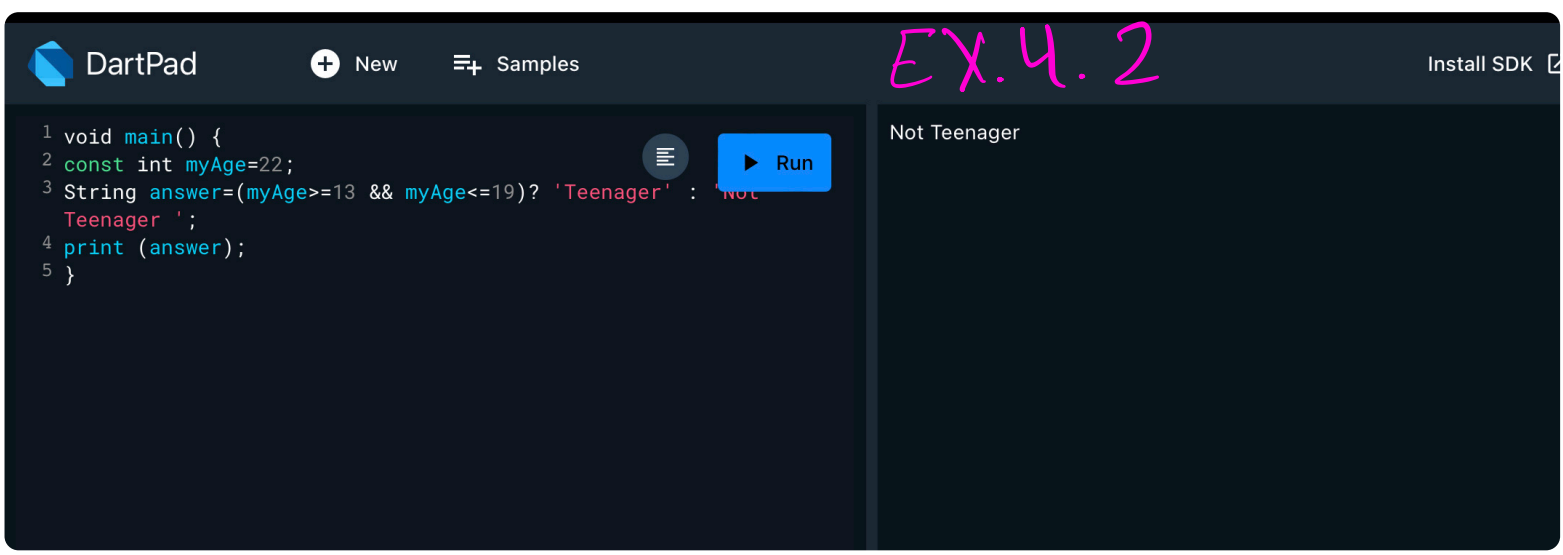
1. Create a constant named myAge and initialize it with your age. Write an if statement to print out "Teenager" if your age is between 13 and 19, and "Not a teenager" if your age is not between 13 and 19.
2. Use a ternary conditional operator to replace the else-if statement that you used above. Set the result to a variable named answer.






DartPad
New
Samples
EX.3
Insta
Run
void main() {
const myAge=22;
const isTeenager=myAge>=13&& myAge<=19;
print ('isTeenager: $isTeenager');
const maryAge=30;
const bothTeenagers=(maryAge>=13&& maryAge<=19)&& isTeenager;
print('bothTeenagers: $bothTeenagers');
const reader= 'Aljwhara';
const ray =' Ray Wenderlich'; const rayIsReader=reader==ray;
print('rayIsReader: $rayIsReader');
}
isTeenager: false
bothTeenagers: false
rayIsReader: false


DartPad
New
Samples
EX.4.1
Run
void main() {
const int myAge=22; if(myAge>=13 && myAge<=19)
print ('Teenager');
else {
print ('Not Teenager'); }
}
Not Teenager


DartPad
New
Samples
EX.4.2
Install SDK
Run
void main() {
const int myAge=22;
String answer=(myAge>=13 && myAge<=19)? 'Teenager' : 'Not
Teenager ';
print (answer);
}
Not Teenager