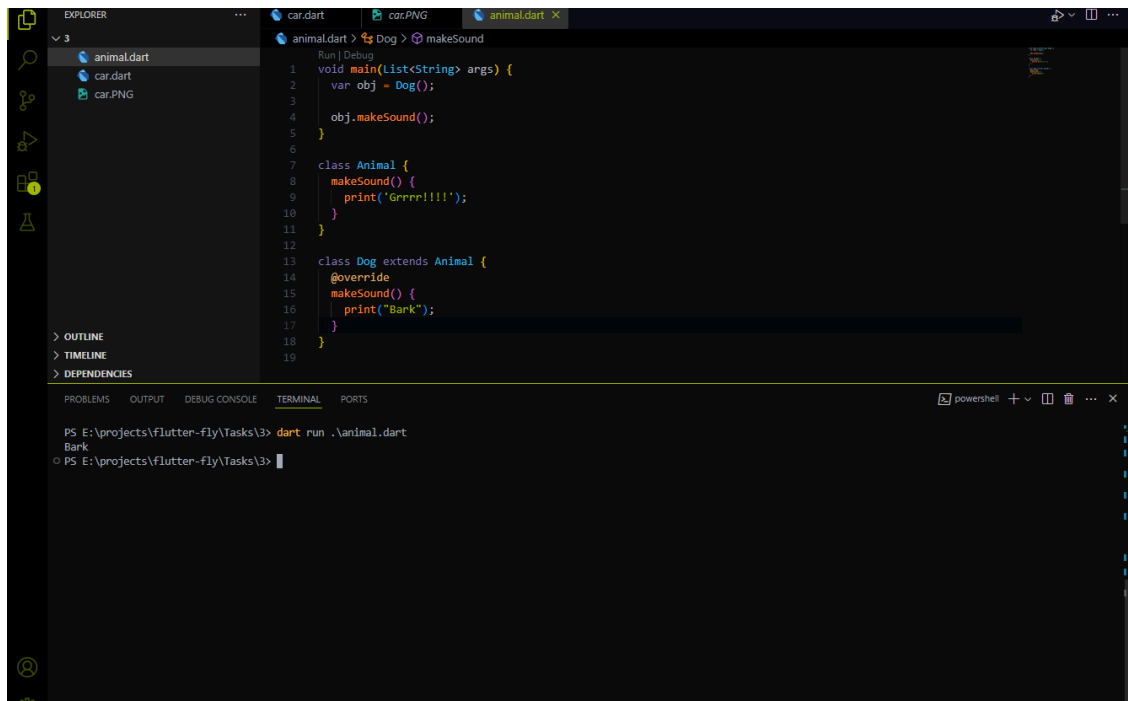


1. Create a class called Car with the following properties: brand, model, and year. Add a constructor to initialise these properties. Then, create an object of the Car class and print out the details of the car.



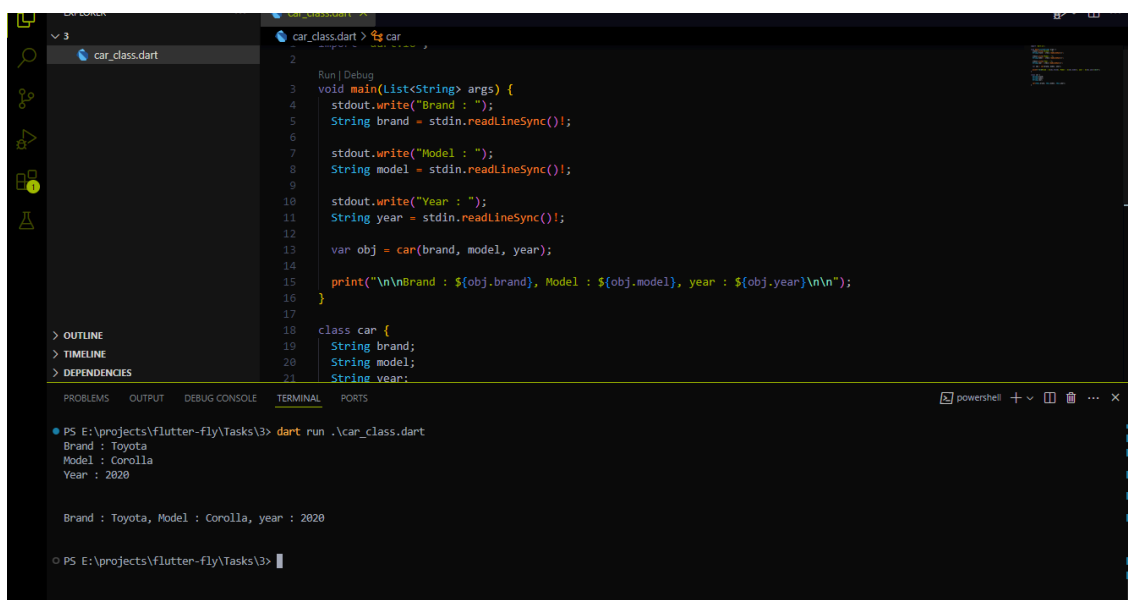
The screenshot shows an IDE with a file explorer on the left containing 'animal.dart', 'car.dart', and 'car.PNG'. The main editor displays 'animal.dart' with the following code:

```
1 void main(List<String> args) {  
2   var obj = Dog();  
3  
4   obj.makeSound();  
5 }  
6  
7 class Animal {  
8   makeSound() {  
9     print('Grrrr!!!!');  
10  }  
11 }  
12  
13 class Dog extends Animal {  
14   @override  
15   makeSound() {  
16     print('Bark');  
17   }  
18 }  
19
```

The bottom panel shows the terminal output:

```
PS E:\projects\flutter-fly\Tasks\3> dart run .\animal.dart  
Bark  
PS E:\projects\flutter-fly\Tasks\3>
```

2. a base class called Animal with a method makeSound() that prints a generic sound. Then, create a subclass Dog that overrides the makeSound() method to print a dog-specific sound. Finally, create an object of the Dog class and call its makeSound() method.



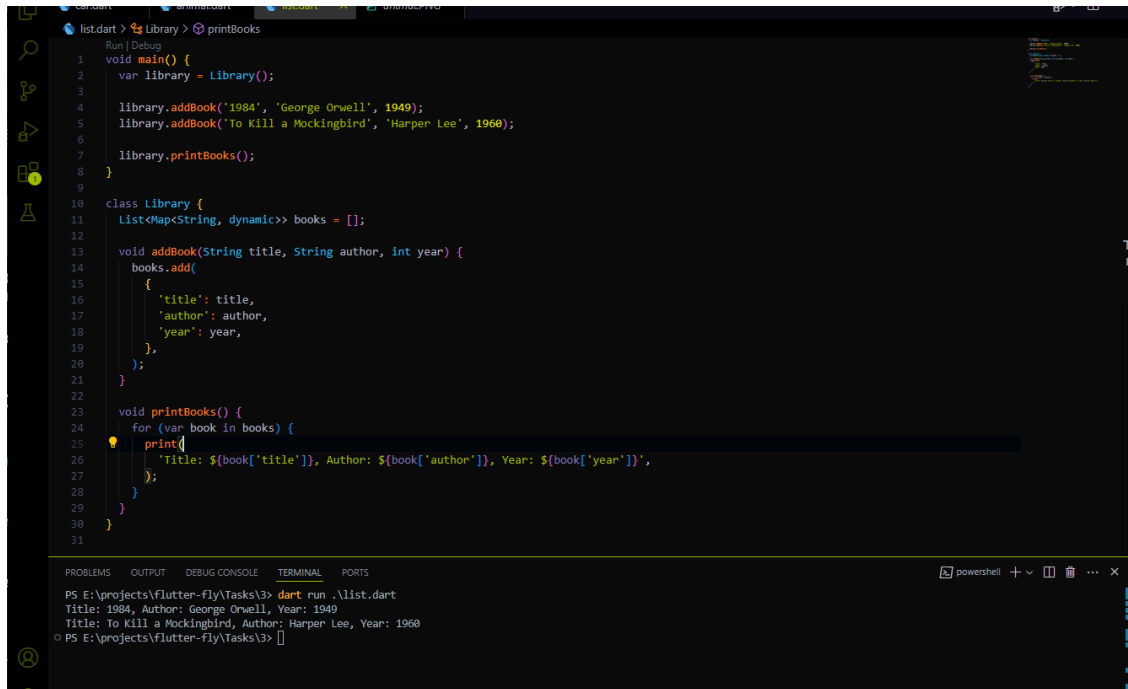
The screenshot shows an IDE with a file explorer on the left containing 'car\_class.dart'. The main editor displays 'car\_class.dart' with the following code:

```
2  
3 void main(List<String> args) {  
4   stdout.write("Brand : ");  
5   String brand = stdin.readLineSync();  
6  
7   stdout.write("Model : ");  
8   String model = stdin.readLineSync();  
9  
10  stdout.write("Year : ");  
11  String year = stdin.readLineSync();  
12  
13  var obj = car(brand, model, year);  
14  
15  print("\n\nBrand : ${obj.brand}, Model : ${obj.model}, year : ${obj.year}\n\n");  
16 }  
17  
18 class car {  
19   String brand;  
20   String model;  
21   String year;
```

The bottom panel shows the terminal output:

```
PS E:\projects\flutter-fly\Tasks\3> dart run .\car_class.dart  
Brand : Toyota  
Model : Corolla  
Year : 2020  
  
Brand : Toyota, Model : Corolla, year : 2020  
PS E:\projects\flutter-fly\Tasks\3>
```

3. Create a class called Library with a property that is a list of maps. Each map represents a book with keys title, author, and year. Add a method to add a book to the list and another method to print all books in the library.



```
1 void main() {  
2   var library = Library();  
3  
4   library.addBook('1984', 'George Orwell', 1949);  
5   library.addBook('To Kill a Mockingbird', 'Harper Lee', 1960);  
6  
7   library.printBooks();  
8 }  
9  
10 class Library {  
11   List<Map<String, dynamic>> books = [];  
12  
13   void addBook(String title, String author, int year) {  
14     books.add(  
15       {  
16         'title': title,  
17         'author': author,  
18         'year': year,  
19       },  
20     );  
21   }  
22  
23   void printBooks() {  
24     for (var book in books) {  
25       print(  
26         'Title: ${book['title']}, Author: ${book['author']}, Year: ${book['year']}',  
27       );  
28     }  
29   }  
30 }  
31
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS E:\projects\flutter-fly\Tasks3> dart run .\list.dart  
Title: 1984, Author: George Orwell, Year: 1949  
Title: To Kill a Mockingbird, Author: Harper Lee, Year: 1960  
PS E:\projects\flutter-fly\Tasks3> []