

**3.1. Create a class named Candidate with Candidate\_ID, Candidate\_Name, Candidate\_Age, Candidate\_Weight and Candidate\_Height data members. Also create a method GetCandidateDetails() and DisplayCandidateDetails(). Create main method to demonstrate the Candidate class. (A)**

**Code:**

```
import "dart:io";

class Candidate {
  int candidateID = 0;
  String candidateName = "";
  int candidateAge = 0;
  double candidateHeight = 0;
  double candidateWeight = 0;

  void getCandidate() {
    print("enter id of candidate:");
    candidateID = int.parse(stdin.readLineSync()!);

    print("enter candidate name:");
    candidateName = stdin.readLineSync()!;

    print("enter candidate age:");
    candidateAge = int.parse(stdin.readLineSync()!);

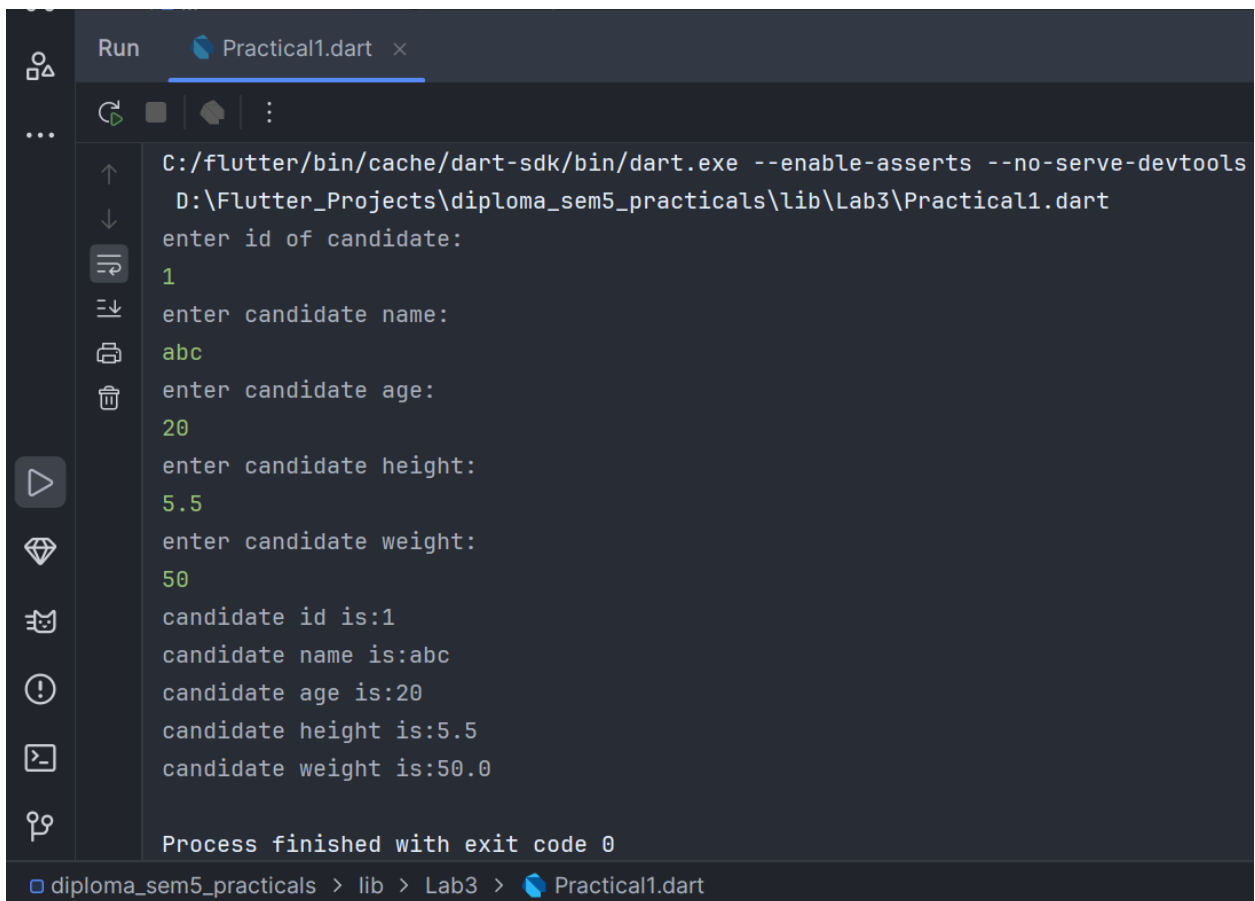
    print("enter candidate height:");
    candidateHeight = double.parse(stdin.readLineSync()!);

    print("enter candidate weight:");
    candidateWeight = double.parse(stdin.readLineSync()!);
  }

  void displayCandidateDetails() {
    print("candidate id is:$candidateID");
    print("candidate name is:$candidateName");
    print("candidate age is:$candidateAge");
    print("candidate height is:$candidateHeight");
    print("candidate weight is:$candidateWeight");
  }
}
```

```
}  
}  
  
void main() {  
    Candidate c1 = Candidate();  
    c1.getCandidate();  
  
    c1.displayCandidateDetails();  
}
```

Output:



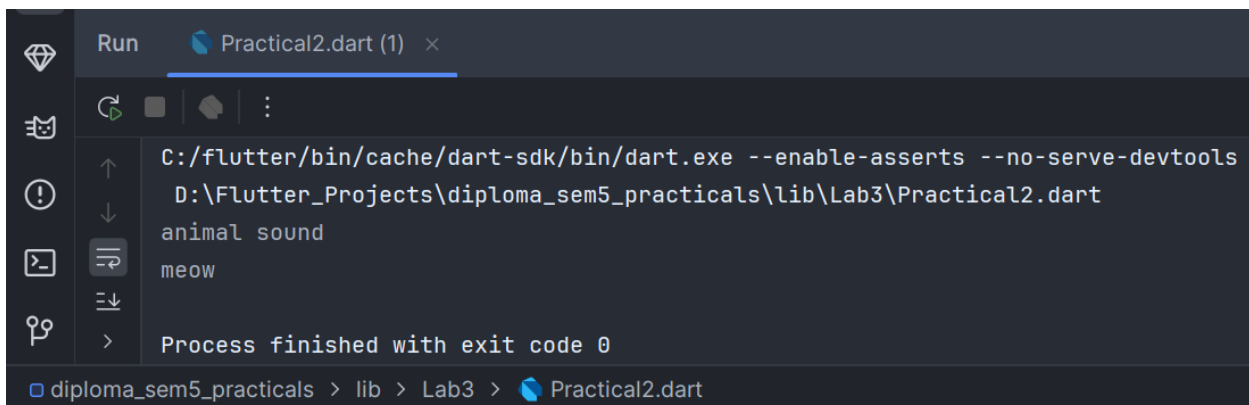
```
Run Practical1.dart x  
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools  
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab3\Practical1.dart  
enter id of candidate:  
1  
enter candidate name:  
abc  
enter candidate age:  
20  
enter candidate height:  
5.5  
enter candidate weight:  
50  
candidate id is:1  
candidate name is:abc  
candidate age is:20  
candidate height is:5.5  
candidate weight is:50.0  
  
Process finished with exit code 0  
diploma_sem5_practicals > lib > Lab3 > Practical1.dart
```

**3.2. W.A.P. to create class Animal that has a method called animalSound() Subclass of Animals is cat it has its own implementation of an animal sound. (B)**

**Code:**

```
class Animal {  
    void animalSound() {  
        print("animal sound");  
    }  
}  
  
class Cat extends Animal {  
    @override  
    void animalSound() {  
        print("meow");  
    }  
}  
  
void main() {  
    Animal a = Animal();  
    a.animalSound();  
  
    Cat c = Cat();  
    c.animalSound();  
}
```

**Output:**



```
Run Practical2.dart (1) x  
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools  
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab3\Practical2.dart  
animal sound  
meow  
Process finished with exit code 0  
diploma_sem5_practicals > lib > Lab3 > Practical2.dart
```

3. W.A.P. to find friends detail by their name using dictionary. (Create local dictionary and search from it using Map & Model Class) (C)

Code:

```
import "dart:io";
class Friend {
  String name;
  int age;
  Friend(this.name, this.age);
  void display() {
    print("Name:$name");
    print("age:$age");
  }
}
void main() {
  Map<String, Friend> friends = {
    "abc": Friend("abc", 22),
    "xyz": Friend("xyz", 20),
    "asd": Friend("asd", 18)
  };
  print("enter search name:");
  String searchName = stdin.readLineSync()!;
  if (friends.containsKey(searchName)) {
    print("friend found");
    Friend friend = friends[searchName]!;
    friend.display();
  }
}
```



## Output:

```
Run Practical3.dart x
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab3\Practical3.dart
enter search name:
abc
friend found
Name:abc
age:22
Process finished with exit code 0
diploma_sem5_practicals > lib > Lab3 > Practical3.dart
```