Start with the following list of numbers:
```
const numbers = [1, 2, 4, 7];
```
Print the square of each number: 1, 4, 16 and 49.
1. First, use a for loop.
2. Solve the problem again using a for-in loop.

Exercise 2:
1. Create a class named User as follows:

```
class User {
int id = 213;
String name = 'Fatima';
}
```

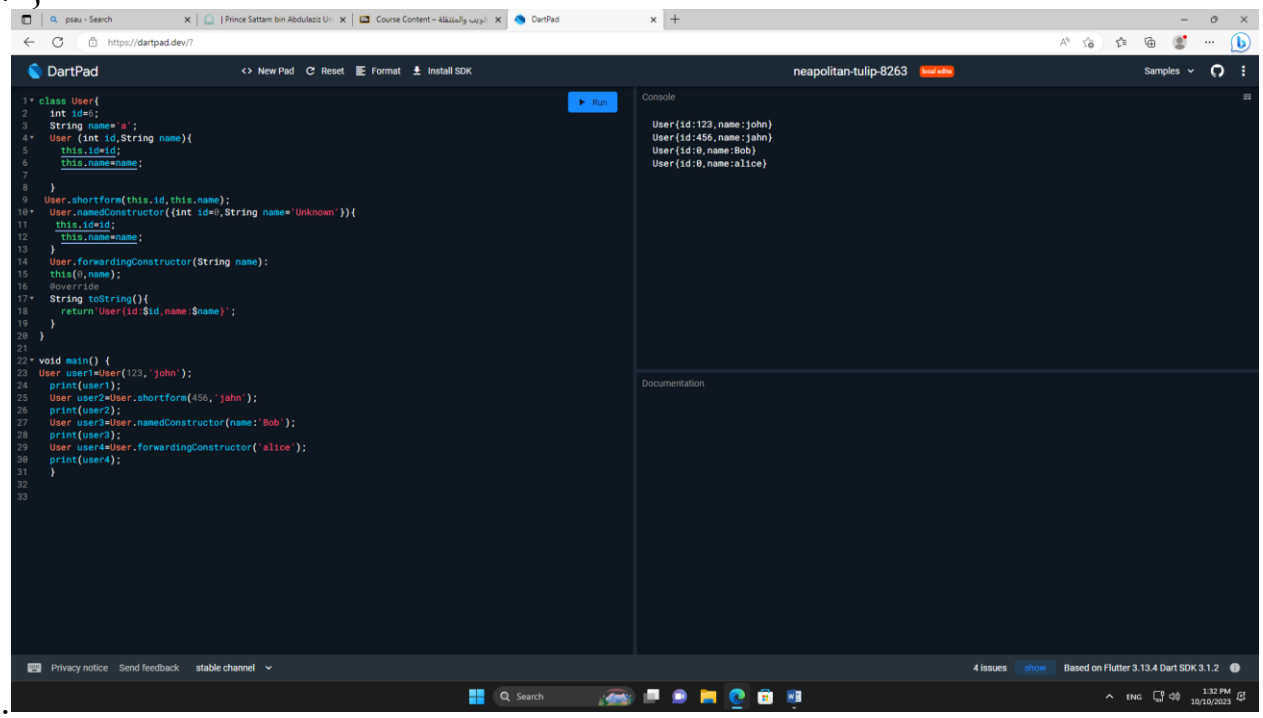
2. Create an object using this class
3. Print the object you created.
4. What will appear in the screen.
5. Define a toString method.
6. Print the object again
7. What will appear in the screen.

Exercise 3:
1. Create a constructor using the long-form, Short-Form, name constructor, and forwarding methods to initialize the id and the name of the user
2. Use the constructors to create an object from the class
8. Define a toString method.
9. Print the object again for each constructor you used

```
10.class User{
11.  int id=6;
12.  String name='a';
13.  User (int id,String name){
14.    this.id=id;
15.    this.name=name;
16.
17.  }
18. User.shortform(this.id,this.name);
19.  User.namedConstructor({int id=0,String name='Unknown'}){
20.   this.id=id;
21.    this.name=name;
22.  }
23.  User.forwardingConstructor(String name):
```

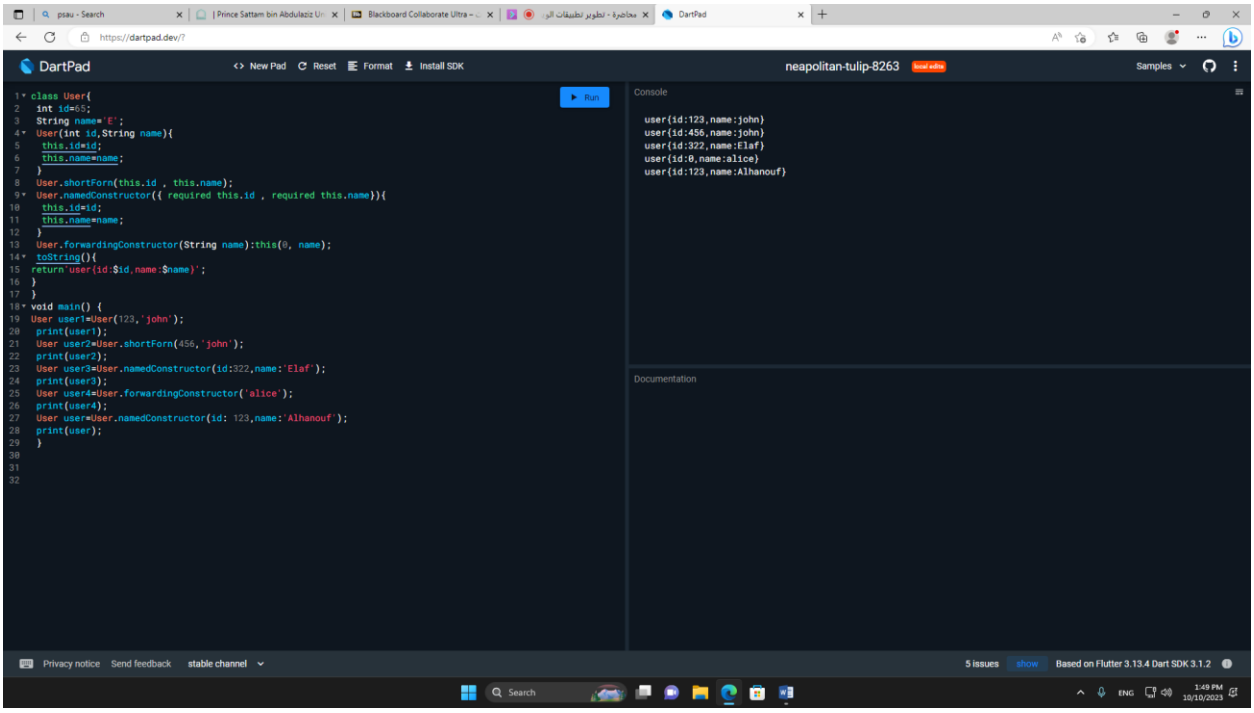
```
24.  this(0,name);
25.  @override
26.  String toString(){
27.    return'User{id:$id,name:$name}';
28.  }
29.}
30.
31.void main() {
32.User user1=User(123,'john');
33.  print(user1);
34.  User user2=User.shortform(456,'jahn');
35.  print(user2);
36.  User user3=User.namedConstructor(name:'Bob');
37.  print(user3);
38.  User user4=User.forwardingConstructor('alice');
39.  print(user4);
40.  }
```

41.



1. Define one of the previous constructor with name parameters.
2. Create object and print it.

```
class User{
 int id=65;
 String name='E';
 User(int id,String name){
  this.id=id;
  this.name=name;
 }
 User.shortForn(this.id , this.name);
 User.namedConstructor({ required this.id , required this.name}){
  this.id=id;
  this.name=name;
 }
 User.forwardingConstructor(String name):this(0, name);
 toString(){
return'user{id:$id,name:$name}';
}
}
void main() {
User user1=User(123,'john');
 print(user1);
 User user2=User.shortForn(456,'john');
 print(user2);
 User user3=User.namedConstructor(id:322,name:'Elaf');
 print(user3);
 User user4=User.forwardingConstructor('alice');
 print(user4);
 User user=User.namedConstructor(id: 123,name:'Alhanouf');
 print(user);
 }
```



Exercise 5:

1. Define the previous class with private instance variables
2. Use set and get methods

```
class UserPrivate{
 int id=65;
 String name='E';
 UserPrivate(this.id,this.name);
  int get id1=>id;
  set id1(int v){
    id=v;
  }
  String get name1=>name;
  set name1(String){
    name='v';
  }
  String toString(){
    return'user{id:$id,string:$name}';
}


}
```

```
void main() {
UserPrivate user1= UserPrivate(123,'Alhanouf');
 print(user1);
 user1.id=683;
  user1.name="Elaf";
 print(user1);

 }
```