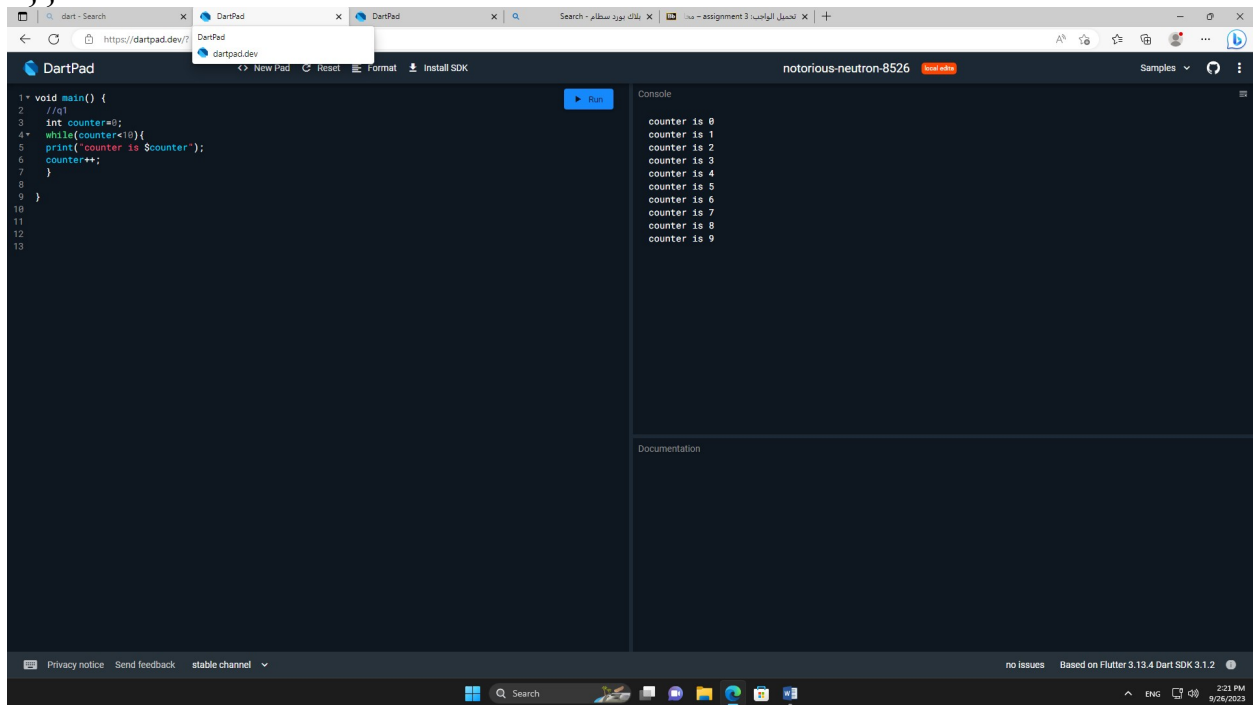


## Exercises 1

1. Create a variable named counter and set it equal to 0.
2. Create a while loop with the condition counter < 10.
3. The loop body should print out “counter is X” (where X is replaced with the value of counter) and then increment counter by 1.

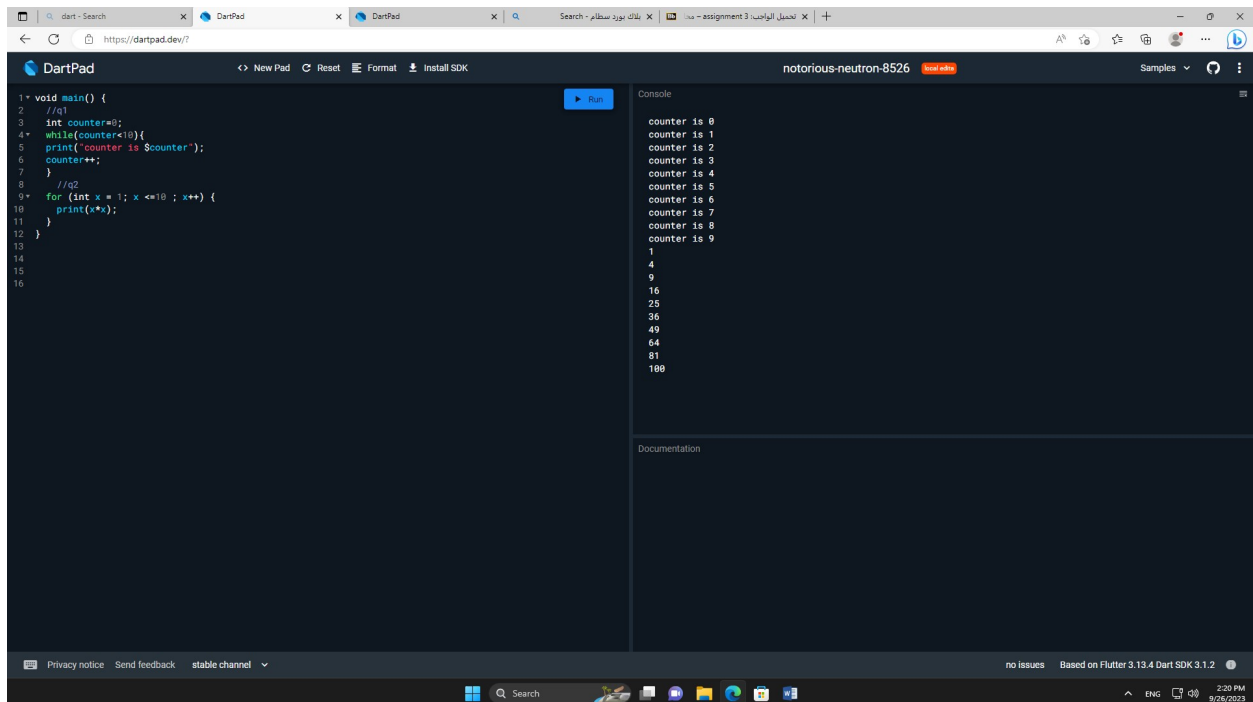
```
void main() {  
  
    int counter=0;  
    while(counter<10){  
        print("counter is $counter");  
        counter++;  
    }  
}
```



## Exercises 2

1. Write a for loop starting at 1 and ending with 10 inclusive.
2. Print the square of each number.

```
for (int x = 1; x <=10 ; x++) {  
    print(x*x);  
}
```



```
1* void main() {
2  //q1
3  int counter=0;
4  while(counter<10){
5    print('counter is $counter');
6    counter++;
7  }
8  //q2
9  for (int x = 1; x <=10; x++) {
10   print(x*x);
11 }
12 }
13
14
15
16
```

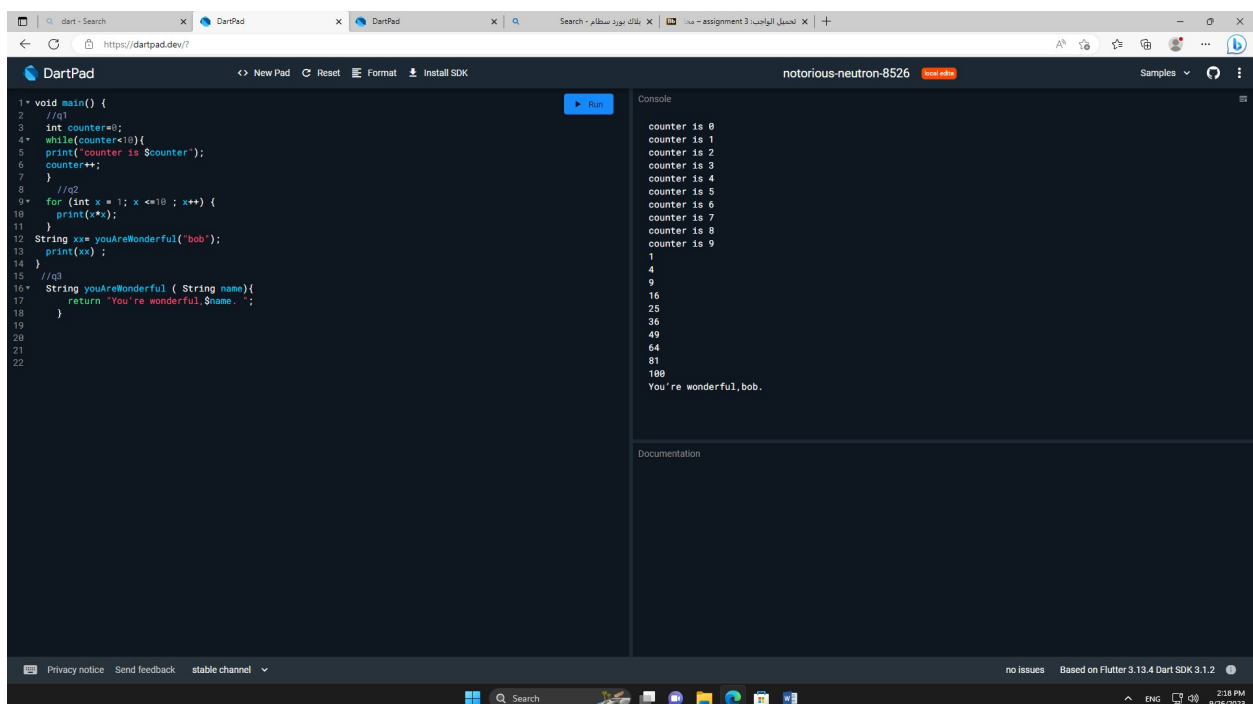
Console

```
counter is 0
counter is 1
counter is 2
counter is 3
counter is 4
counter is 5
counter is 6
counter is 7
counter is 8
counter is 9
1
4
9
16
25
36
49
64
81
100
```

Documentation

## Exercises 3

1. Write a function named `youAreWonderful`, with a string parameter called `name`. It should return a string using `name`, and say something like “You’re wonderful, Bob.”



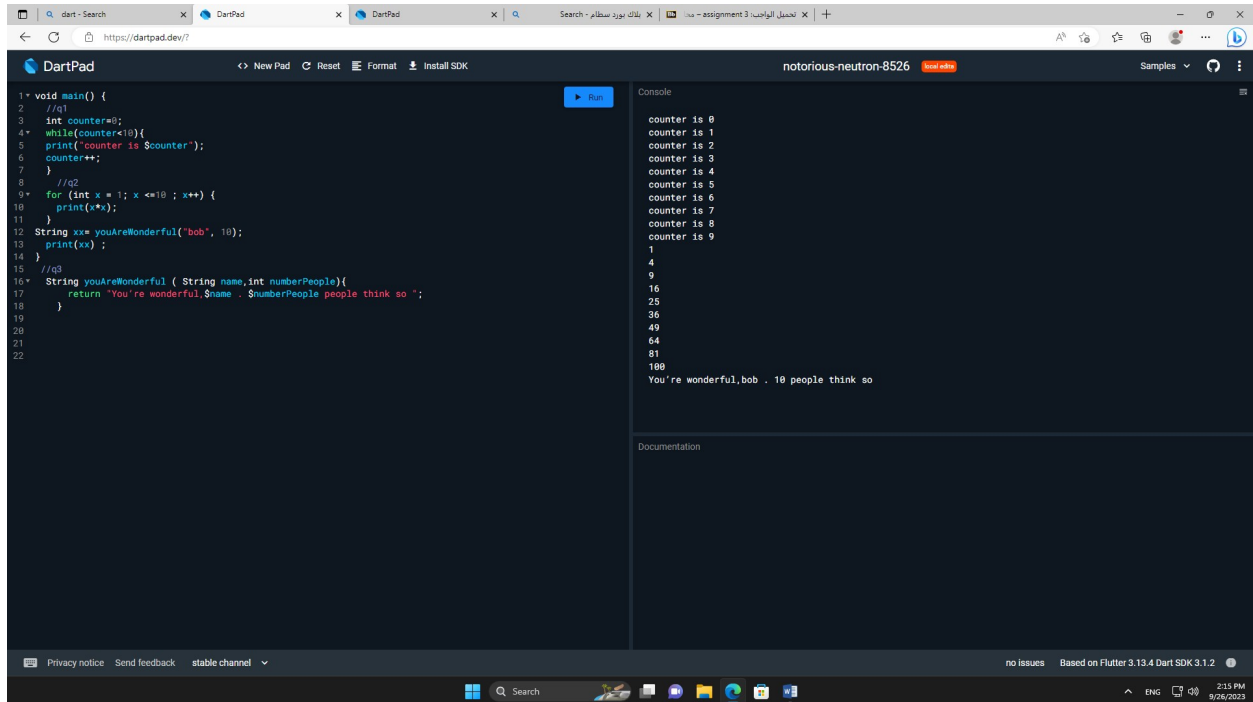
```
1* void main() {
2  //q1
3  int counter=0;
4  while(counter<10){
5    print('counter is $counter');
6    counter++;
7  }
8  //q2
9  for (int x = 1; x <=10; x++) {
10   print(x*x);
11 }
12 String xx= youAreWonderful("bob");
13 print(xx);
14 }
15 //q3
16* String youAreWonderful (String name){
17   return "You're wonderful, $name.";
18 }
19
20
21
22
```

Console

```
counter is 0
counter is 1
counter is 2
counter is 3
counter is 4
counter is 5
counter is 6
counter is 7
counter is 8
counter is 9
1
4
9
16
25
36
49
64
81
100
You're wonderful, bob.
```

Documentation

2. Add another int parameter to that function called numberPeople so that the function returns something like “You’re wonderful, Bob. 10 people think so.”



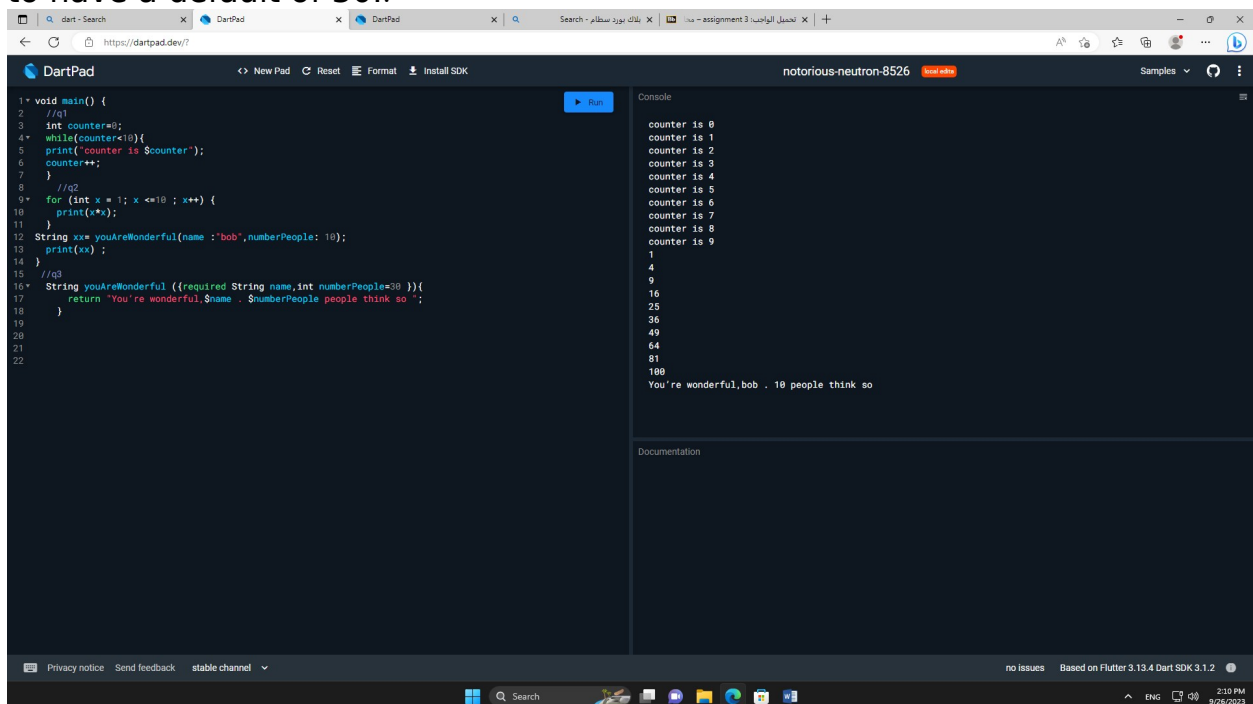
The screenshot shows the DartPad interface with the following Dart code:

```
1* void main() {  
2  //q1  
3  int counter=0;  
4  while(counter<10){  
5    print("counter is $counter");  
6    counter++;  
7  }  
8  //q2  
9  for (int x = 1; x <=10 ; x++) {  
10   print(x*x);  
11 }  
12 String xx= youAreWonderful("bob", 10);  
13 print(xx) ;  
14 }  
15 //q3  
16 String youAreWonderful ( String name,int numberPeople){  
17   return "You're wonderful,$name . $numberPeople people think so ";  
18 }  
19  
20  
21  
22
```

The console output shows the results of the execution:

```
counter is 0  
counter is 1  
counter is 2  
counter is 3  
counter is 4  
counter is 5  
counter is 6  
counter is 7  
counter is 8  
counter is 9  
1  
4  
9  
16  
25  
36  
49  
64  
81  
100  
You're wonderful,bob . 10 people think so
```

3. Make both inputs named parameters. Make name required and set numberPeople to have a default of 30..



The screenshot shows the DartPad interface with the updated Dart code:

```
1* void main() {  
2  //q1  
3  int counter=0;  
4  while(counter<10){  
5    print("counter is $counter");  
6    counter++;  
7  }  
8  //q2  
9  for (int x = 1; x <=10 ; x++) {  
10   print(x*x);  
11 }  
12 String xx= youAreWonderful(name : "bob",numberPeople: 10);  
13 print(xx) ;  
14 }  
15 //q3  
16 String youAreWonderful ({required String name,int numberPeople=30 }){  
17   return "You're wonderful,$name . $numberPeople people think so ";  
18 }  
19  
20  
21  
22
```

The console output is identical to the previous screenshot, showing the results of the execution of the updated function.