1)Install Flutter, make a project by "Flutter create projectname" and then run app by "flutter run"

and take screenshot.


```
Command Prompt
C:\Users\AMJAD>flutter create myapp_amjadali
Creating project myapp_amjadali...
  myapp_amjadali\lib\main.dart (created)
  myapp_amjadali\pubspec.yaml (created)
  myapp_amjadali\README.md (created)
  myapp_amjadali\test\widget_test.dart (created)
  myapp_amjadali\.gitignore (created)
  myapp_amjadali\.idea\libraries\Dart_SDK.xml (created)
  myapp_amjadali\.idea\libraries\KotlinJavaRuntime.xml (created)
  myapp_amjadali\.idea\modules.xml (created)
  myapp_amjadali\.idea\runConfigurations\main_dart.xml (created)
  myapp_amjadali\.idea\workspace.xml (created)
  myapp_amjadali\.metadata (created)
  myapp_amjadali\analysis_options.yaml (created)
  myapp_amjadali\android\app\build.gradle (created)
  myapp_amjadali\android\app\src\main\kotlin\com\example\myapp_amjadali\MainActivity.kt (
  myapp_amjadali\android\build.gradle (created)
```

```
Microsoft Windows [Version 10.0.19042.1237]
(c) Microsoft Corporation. All rights reserved.

C:\Users\AMJAD\myapp_amjadali>flutter run
Multiple devices found:
Chrome (web) • chrome • web-javascript • Google Chrome 94.0.4606.61
Edge (web)   • edge   • web-javascript • Microsoft Edge 94.0.992.31
[1]: Chrome (chrome)
[2]: Edge (edge)
Please choose one (To quit, press "q/Q"): 1
Launching lib\main.dart on Chrome in debug mode...
Waiting for connection from debug service on Chrome...         29.8s
This app is linked to the debug service: ws://127.0.0.1:63600/EwkbhH8cBUM=/ws
Debug service listening on ws://127.0.0.1:63600/EwkbhH8cBUM=/ws

 Running with sound null safety

  To hot restart changes while running, press "r" or "R".
For a more detailed help message, press "h". To quit, press "q".

An Observatory debugger and profiler on Chrome is available at: http://127.0.0.1:63600/EwkbhH8cBUM=
Activating Dart DevTools...                                   5.0s
The Flutter DevTools debugger and profiler on Chrome is available at:
http://127.0.0.1:9101?uri=http://127.0.0.1:63600/EwkbhH8cBUM=
```
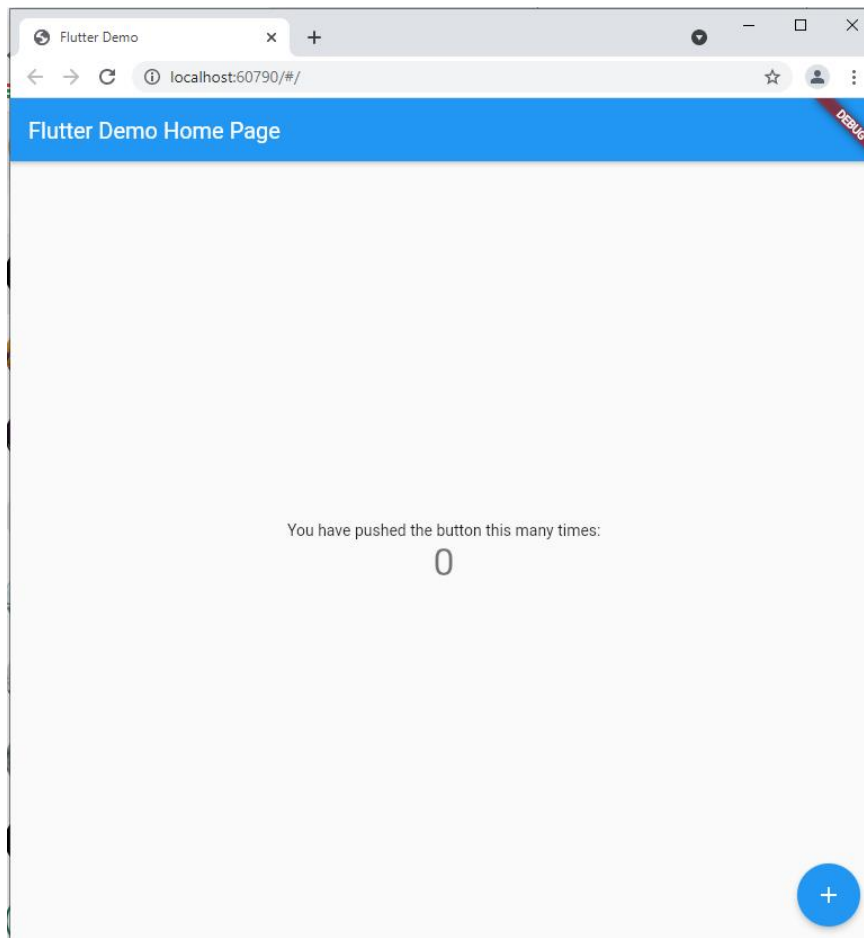
2) To make a function that take a number as parameter, and print the table of that number.

```
void main(List<String> arguments) {
print("*** Printing Table Using Function *** ");
number(7);
}
```

```
void number(int num){
  for (var i = 1; i <=12; i++) {
   print(" $num  X $i = ${num*i}");
  }
}
```

PROBLEMS 1   OUTPUT   TERMINAL   DEBUG CONSOLE

```
*** Printing Table Using Function ***
   7  X 1 = 7
   7  X 2 = 14
   7  X 3 = 21
   7  X 4 = 28
   7  X 5 = 35
   7  X 6 = 42
   7  X 7 = 49
   7  X 8 = 56
   7  X 9 = 63
   7  X 10 = 70
   7  X 11 = 77
   7  X 12 = 84
Exited
```

3) List lst = [2,4,6,8,9];

Make a function that takes a number as parameter and divide that parameter to every element

in the list

```
void main(List<String> arguments) {
print("*** Dividing with given list *** ");
number(7);
}
void number(int num){
  List lst=[2,4,6,8,9];
  for (var i = 0; i < lst.length; i++) {



   print("$num / by ${lst[i] } = ${num /lst[i]}");
  }
}
```

PROBLEMS 1   OUTPUT   TERMINAL   DEBUG CONSO

```
*** Dividing with given list ***
7 / by 2 = 3.5
7 / by 4 = 1.75
7 / by 6 = 1.1666666666666667
7 / by 8 = 0.875
7 / by 9 = 0.7777777777777778
Exited
```

4) Make a function for printing mark sheet then Make a list of at-least 5 names and another list of

their marks, and print the mark sheet of all of them.

```
void main(List<String> arguments) {
  List names =['Waleed','Amjad','Danial','Hamza','Zaryab'];
  List<double> marks =[450,488,356,299,444];
  print("  ********* INSTITUTE JAWAN PAKSITAN *********");
```

```dart
  print("   *********   STUDENT's MARKSHEET   *********\n");

for (var i = 0; i < 5; i++) {
  marksheet(names[i], marks[i]);
}
}
void marksheet(String nam, double tmark) {
  double t_marks = tmark ;
  double prcnt = (t_marks/500)*100;
  String grade = 'NULL';
  if(prcnt>=80){
    grade = 'A';
  }
  else if(prcnt<80){
    grade = 'B';
  }
  else if(prcnt<70 ){
    grade = 'C';
  }
  else if(prcnt<60 ){
    grade = 'D';
  }
  else if(prcnt<50){
    grade = 'F';
  }
    print(" *********************************\n");
  print("NAME :: $nam  ");
  print("TOTAL MARKS GAINED   ==  $t_marks");
  print("         GRADE   ==  $grade  ");
  print("      PERCENTAGE %   ==  $prcnt  ");
  }
```

```
PROBLEMS  2    OUTPUT    TERMINAL    DEBUG CONSOLE

    ********* INSTITUTE JAWAN PAKSITAN *********
      *********    STUDENT's MARKSHEET   *********

    ***********************************

   NAME :: Waleed
   TOTAL MARKS GAINED   ==  450.0
              GRADE  ==  A
         PERCENTAGE %   ==  90.0
   ***********************************

   NAME :: Amjad
   TOTAL MARKS GAINED   ==  488.0
              GRADE  ==  A
         PERCENTAGE %   ==  97.6
   ***********************************

   NAME :: Danial
   TOTAL MARKS GAINED   ==  356.0
              GRADE  ==  B
         PERCENTAGE %   ==  71.2
   ***********************************

   NAME :: Hamza
   TOTAL MARKS GAINED   ==  299.0
              GRADE  ==  B
         PERCENTAGE %   ==  59.8
   ***********************************

   NAME :: Zaryab
   TOTAL MARKS GAINED   ==  444.0
              GRADE  ==  A
         PERCENTAGE %   ==  88.8
   Exited
```

5) Make a function in class and then call it outside class.

```dart
void main(List<String> arguments) {
car c1 = new car();
c1.tyre();
}
class car {

void tyre(){
 print("i have 4 tyres");
 }
}
```

6) Print your name in a sentence using classes.

```
void main(List<String> arguments) {
Myself obj = new Myself();
obj.name();
}
class Myself {
void name(){
 print("Hi there, My name is Amjad Ali Khan");
 }
```

PROBLEMS 2   OUTPUT   TERMINAL   DEBUG CONSOLE

    Hi there, My name is Amjad Ali Khan
    Exited

7) Make a constructor that requires your name, age, education and then print that.

```
void main(List<String> arguments) {
Myself obj = Myself("Amjad", 21, "Undergraduate");
obj .display();
}
class Myself {
late String name;
late int age;
late String education;

 Myself(this.name,this.age,this.education );
display(){
  print("my name is $name");
  print("my age is $age");
  print("my Education is $education");
}
}
```

PROBLEMS   1   OUTPUT   TERMINAL   DEBUG CC

    my name is Amjad
    my age is 21
    my Education is Undergraduate
    Exited

8) Write a Code using inheritance

```dart
void main(List<String> arguments){
animals obj =animals();
obj.properties();
obj.property();
}

class livingThing  {

  void properties(){
print("i can breathe");

  }
  }
class animals extends livingThing {

  void property(){
print("i have 4 legs");
  }
}
```

```
PROBLEMS  4    OUTPUT    TERMINAL    DEBUG CC
   i can breathe
   i have 4 legs
   Exited
```