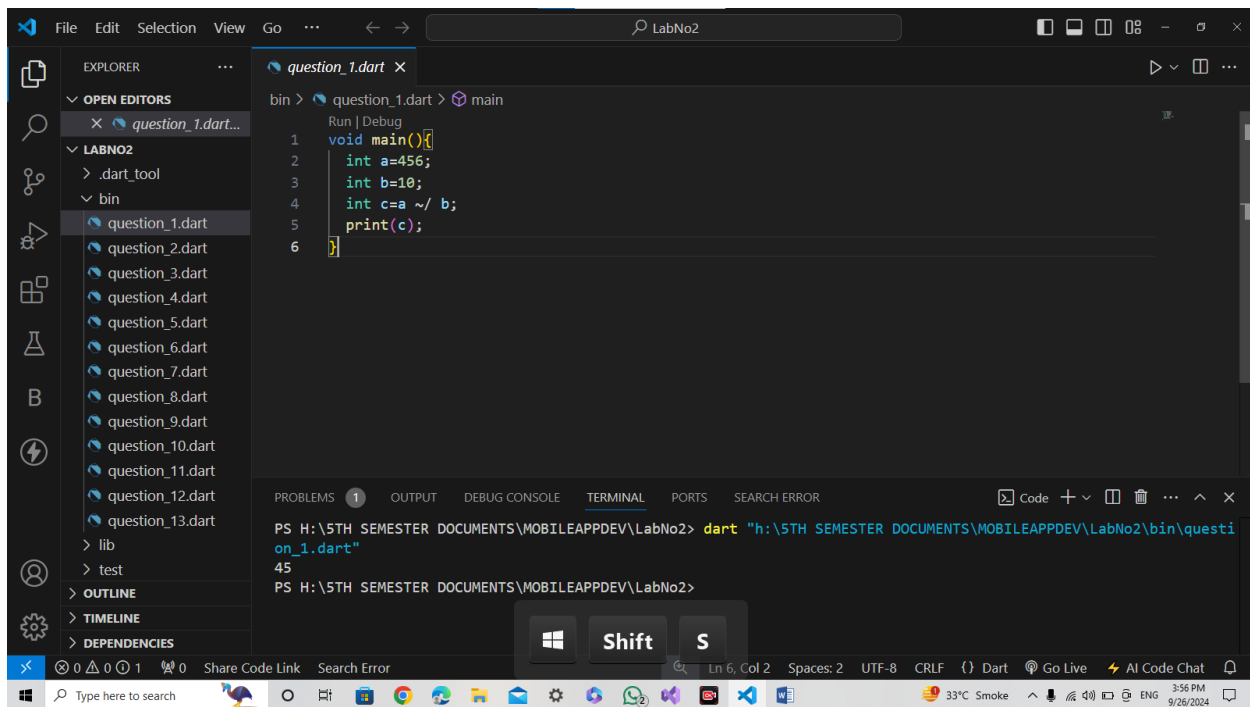# Mobile App Development

Lab No 2:

Practice Questions:

Q#1: Write a Dart program that calculates the result of integer division between two numbers and prints the quotient.
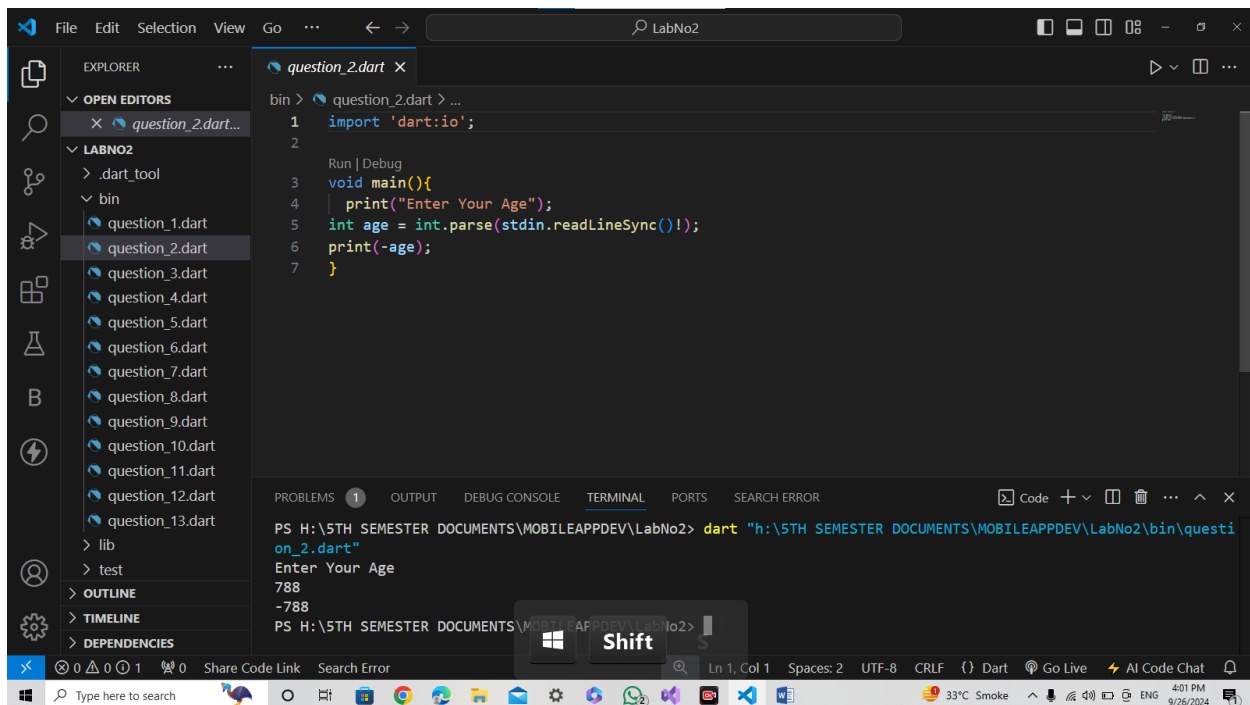
Q#2: Write a Dart program that takes an integer as input (initialize) and prints its negative value using the unary minus operator.

```dart
import 'dart:io';

void main(){
  print("Enter Your Age");
  int age = int.parse(stdin.readLineSync()!);
  print(-age);
}
```
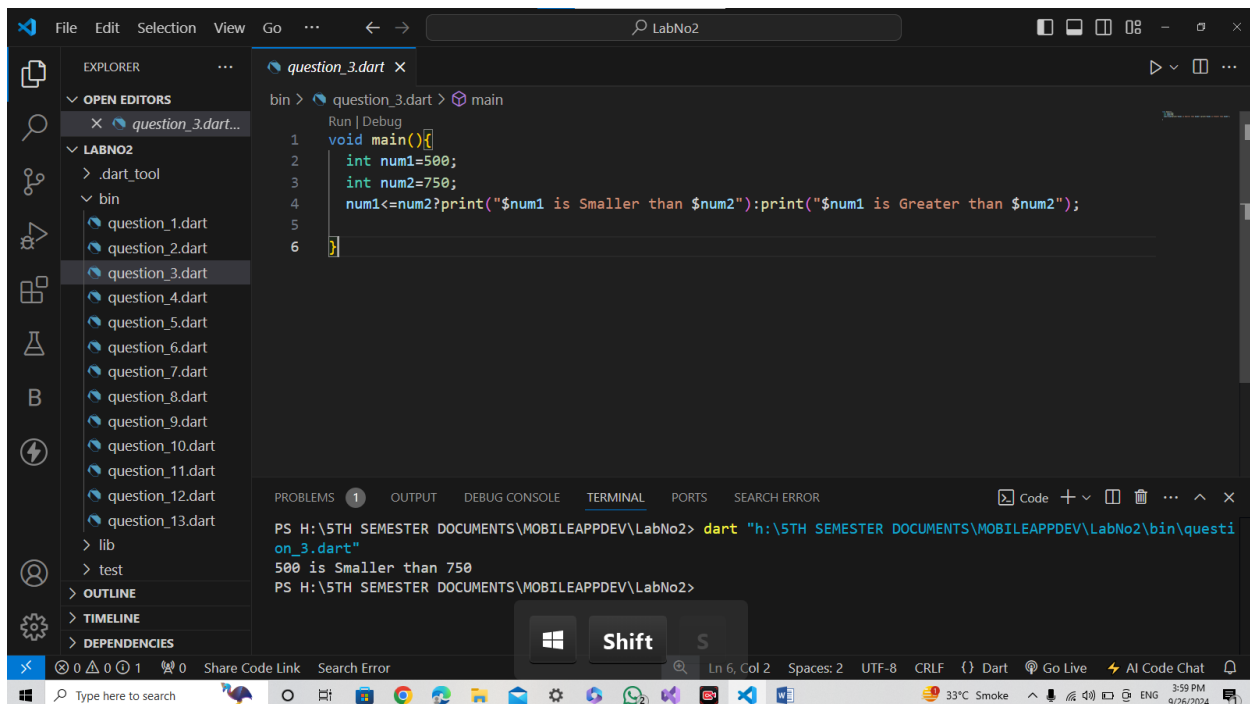
Terminal:
```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_2.dart"
Enter Your Age
788
-788
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```
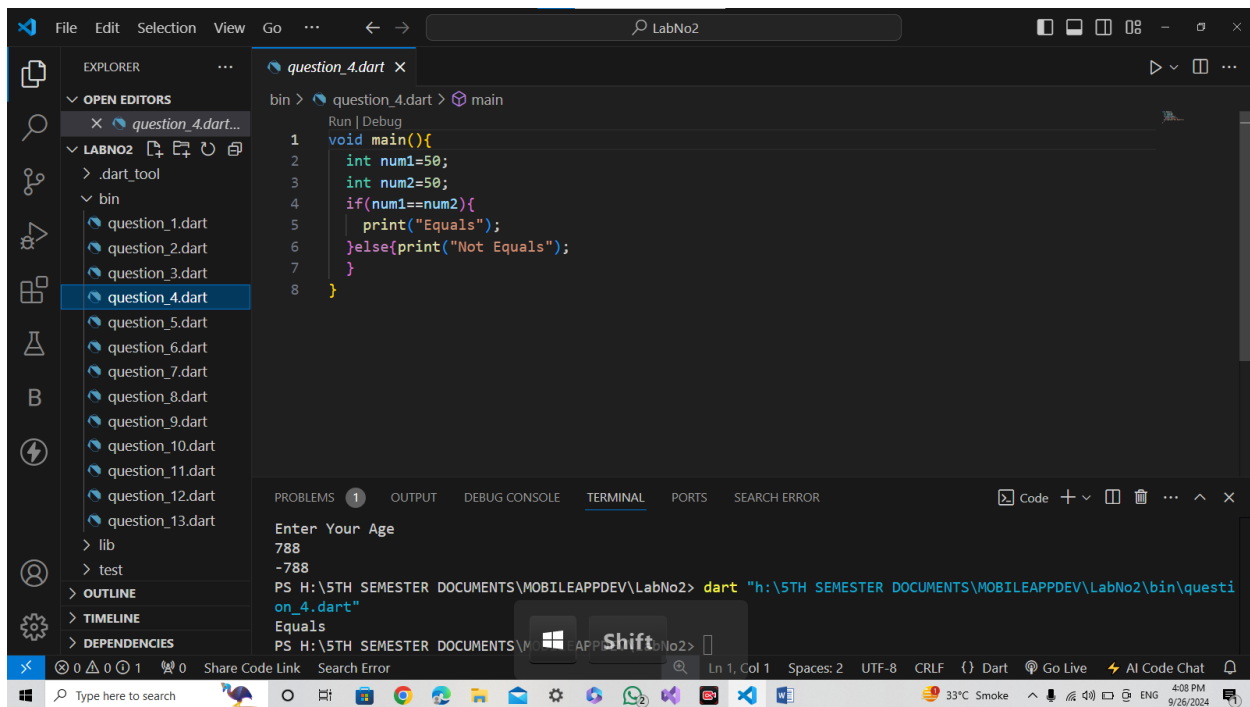
Q#3: Write a Dart program that compares two numbers and prints whether the first number is less than or equal to the second.

```dart
void main(){
  int num1=500;
  int num2=750;
  num1<=num2?print("$num1 is Smaller than $num2"):print("$num1 is Greater than $num2");

}
```

Terminal:
```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_3.dart"
500 is Smaller than 750
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```
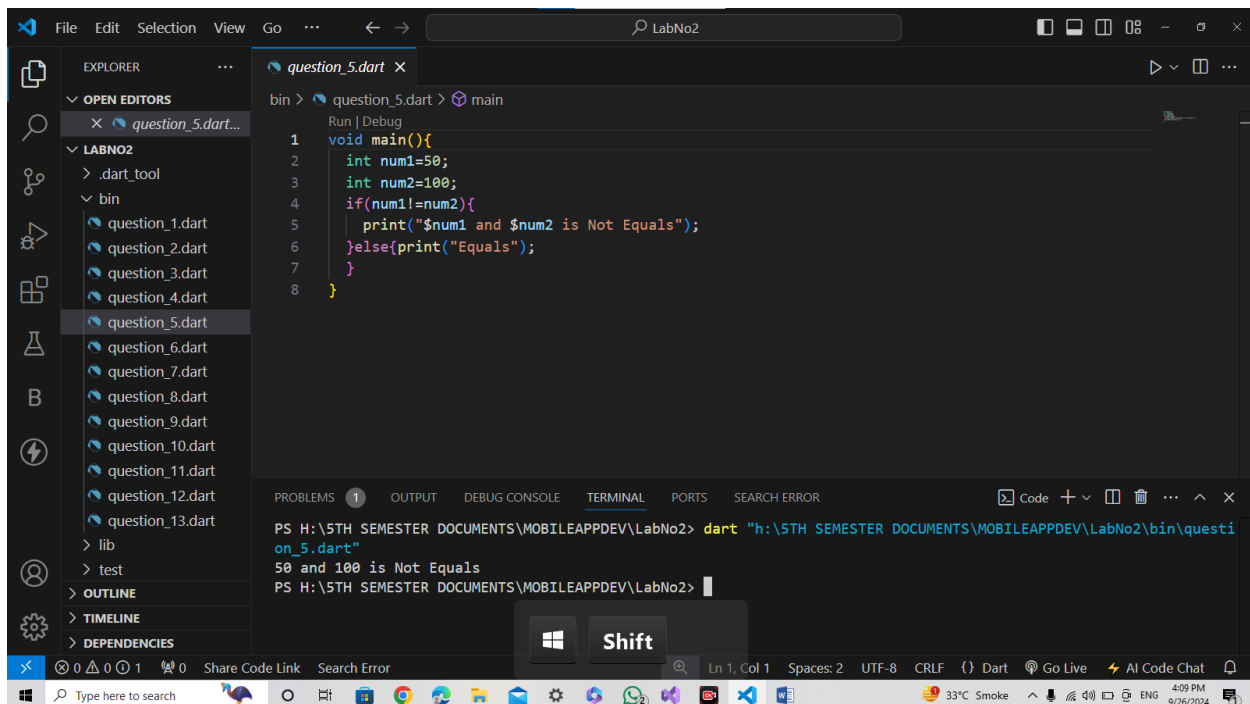
Q#4: Write a Dart program that compares two numbers and prints whether they are equal.


```dart
void main(){
  int num1=50;
  int num2=50;
  if(num1==num2){
    print("Equals");
  }else{print("Not Equals");
  }
}
```

Q#5: Write a Dart program that compares two numbers and prints whether they are not equal.


```dart
void main(){
  int num1=50;
  int num2=100;
  if(num1!=num2){
    print("$num1 and $num2 is Not Equals");
  }else{print("Equals");
  }
}
```

Q#6: Write a Dart program that initializes a variable with a default value and updates it only if the variable is null.

Q#7: Write a Dart program that checks if a person is eligible to vote based on their age and citizenship. The person must be at least 18 years old and a citizen.

Q#8: Write a Dart program that checks if a user is eligible for a discount on a purchase. The discount is applicable if the user is a premium member or if their total purchase amount exceeds $100.

```dart
import 'dart:io';

void main(){
  print("Enter Amount ");
  int amount=int.parse(stdin.readLineSync()!);
  print("Enter User");
  var user =stdin.readLineSync();
  if(user=="Premium"||amount>=1000){
    print("You are Eligble for Discount");
  }else{
    print("Not Eligble");
  }
}
```

Terminal output:
```
on_8.dart"
Enter Amount
1000
Enter User
asad
You are Eligble for Discount
PS H:\5TH SEMESTER DOCUMENTS\MO...
```

Q#9: Write a Dart program that checks if a user has not subscribed to a newsletter. The user will receive a promotional offer only if they are not subscribed.

```dart
void main(){
  bool isUserSubscribed = true;
  // ignore: dead_code
  if(!isUserSubscribed){
    print("You already Subscribed");
  }
  else{
    print("Here is your Promotion Letter");
  }
}
```

Terminal output:
```
Enter User
asad
You are Eligble for Discount
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\questi
on_9.dart"
Here is your Promotion Letter
PS H:\5TH SEMESTER DOCUMENTS\MO...APPDEV\LabNo2> 
```
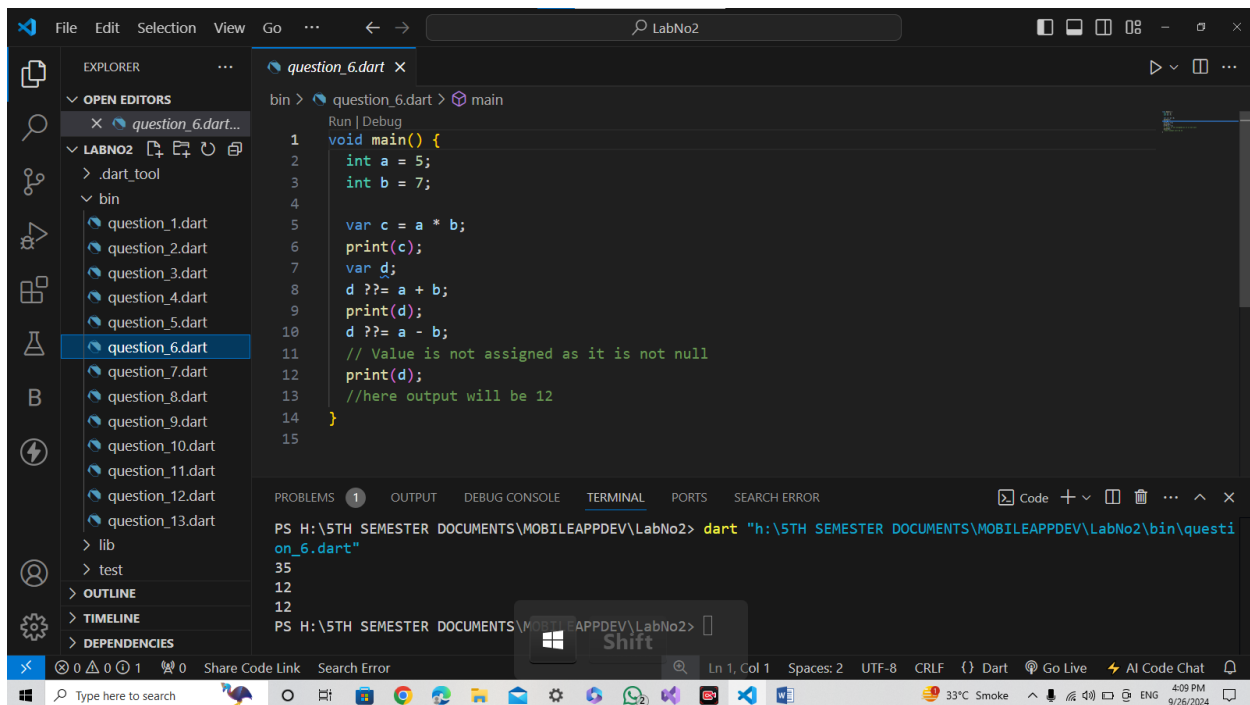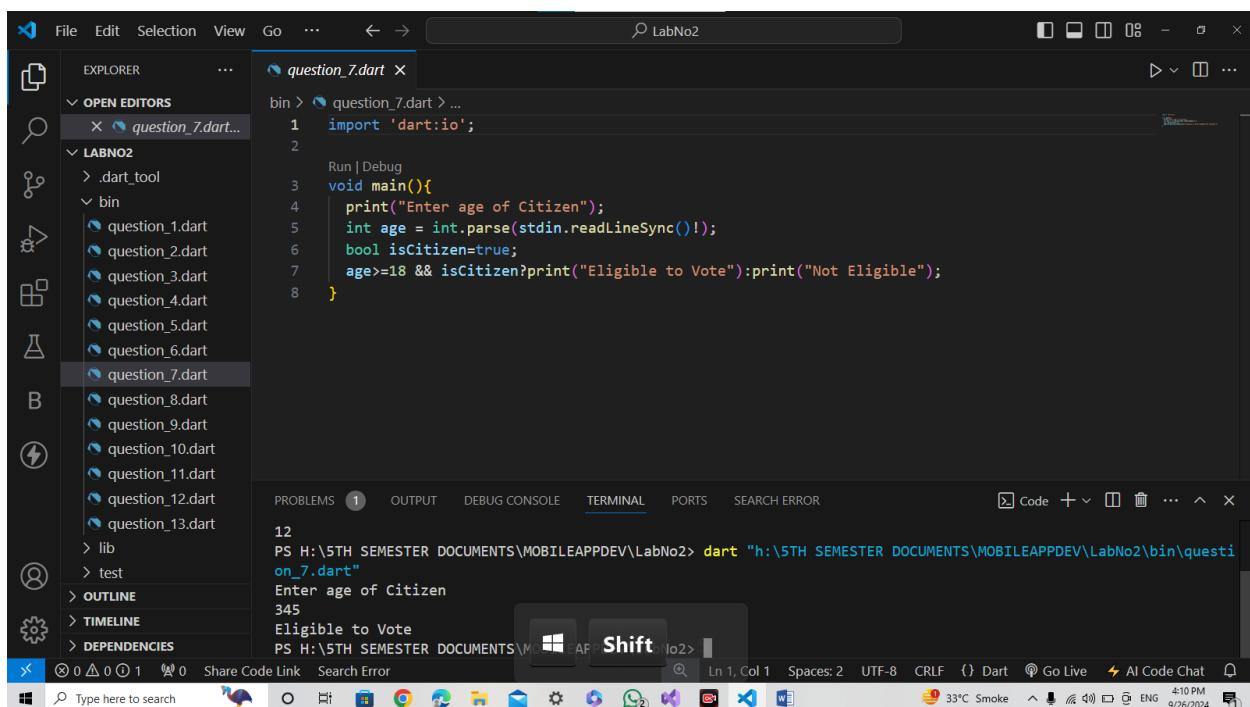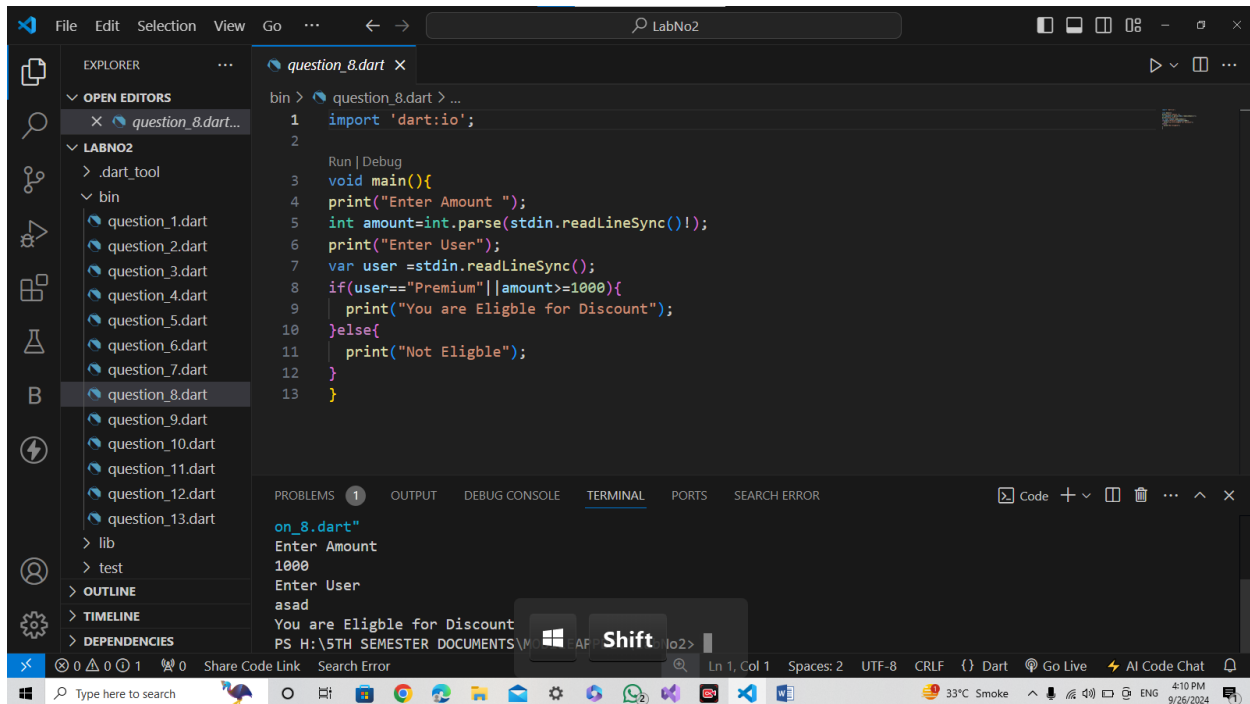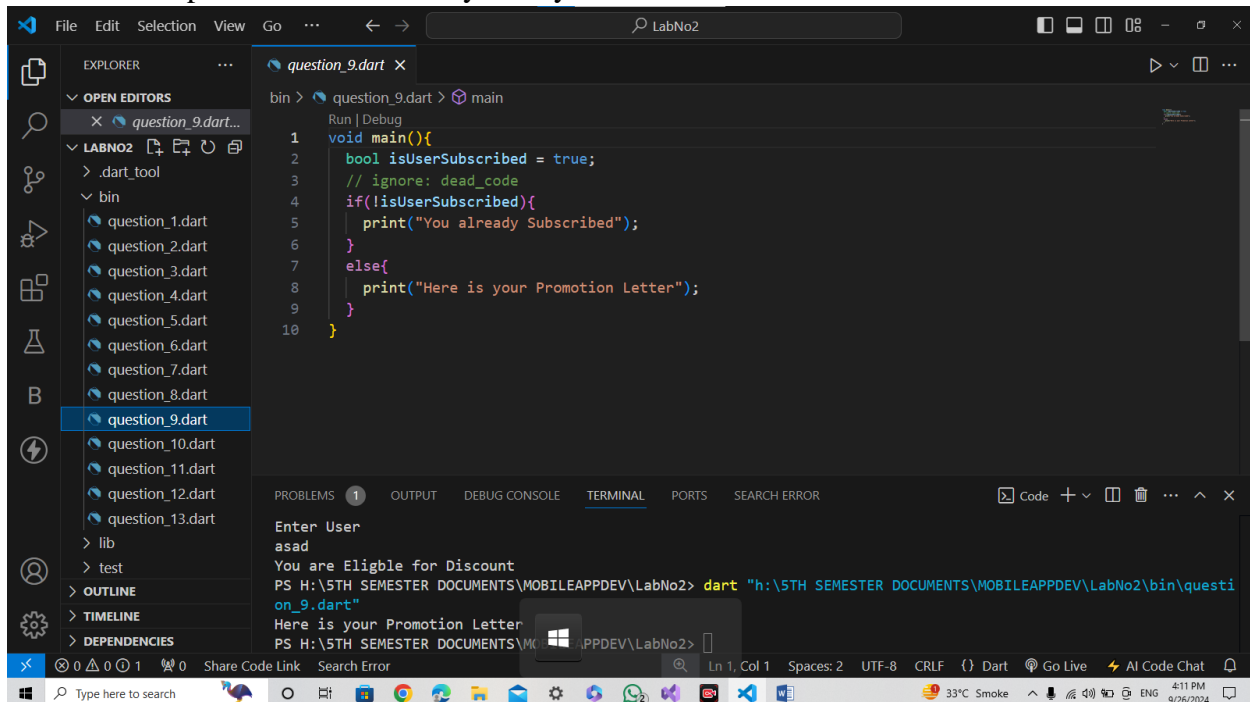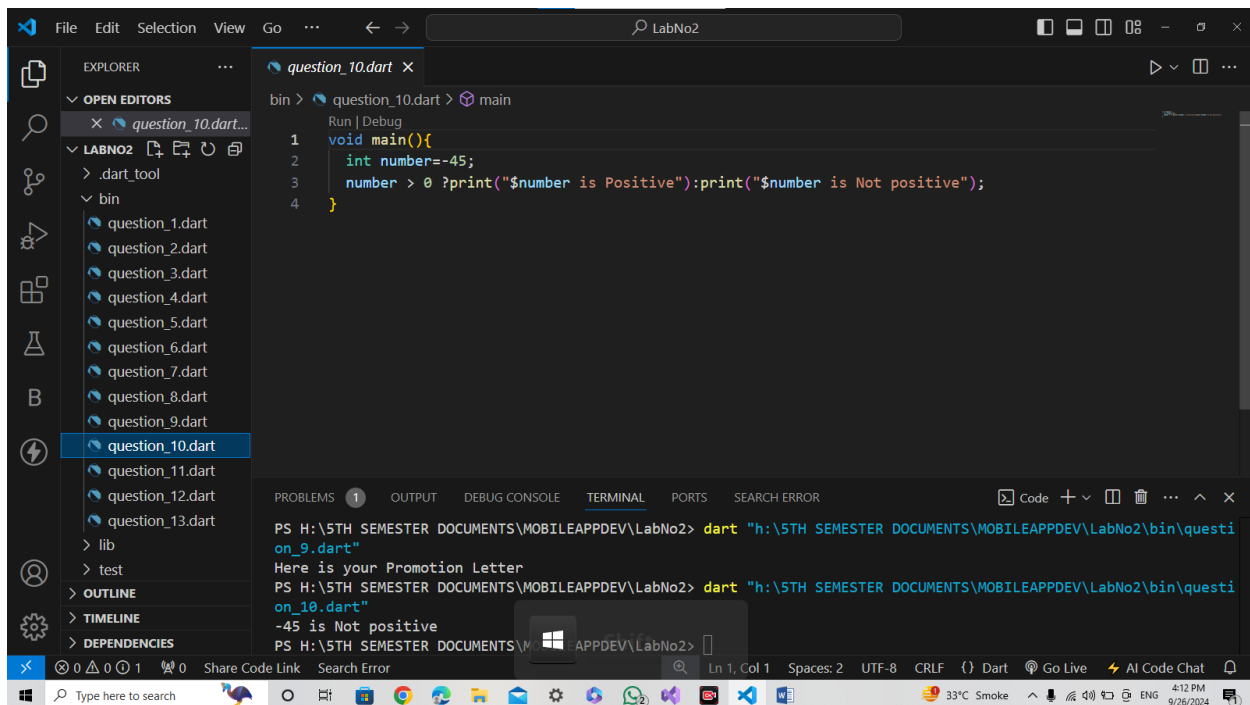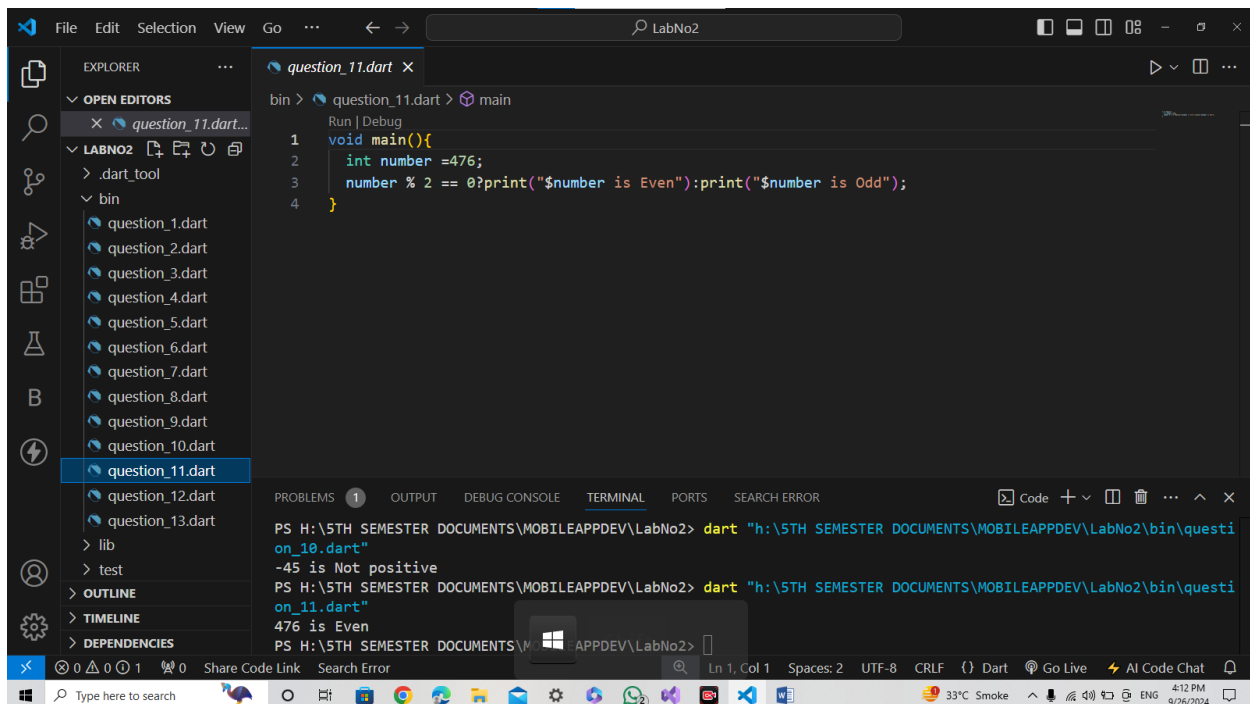
Q#10: Write a Dart program that determines whether a given number is positive or negative using the ternary operator.

Q#11: Write a Dart program that determines whether a given number is even or odd using the ternary operator.

Q#12: Write a Dart program that checks if a person is eligible to vote based on their age, using the ternary operator.

```dart
void main(){
  int age =50;
  age>=18?print("Eligible to Vote"):print("Not Eligible");
}
```

Terminal output:

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_11.dart"
476 is Even
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_12.dart"
Eligible to Vote
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```
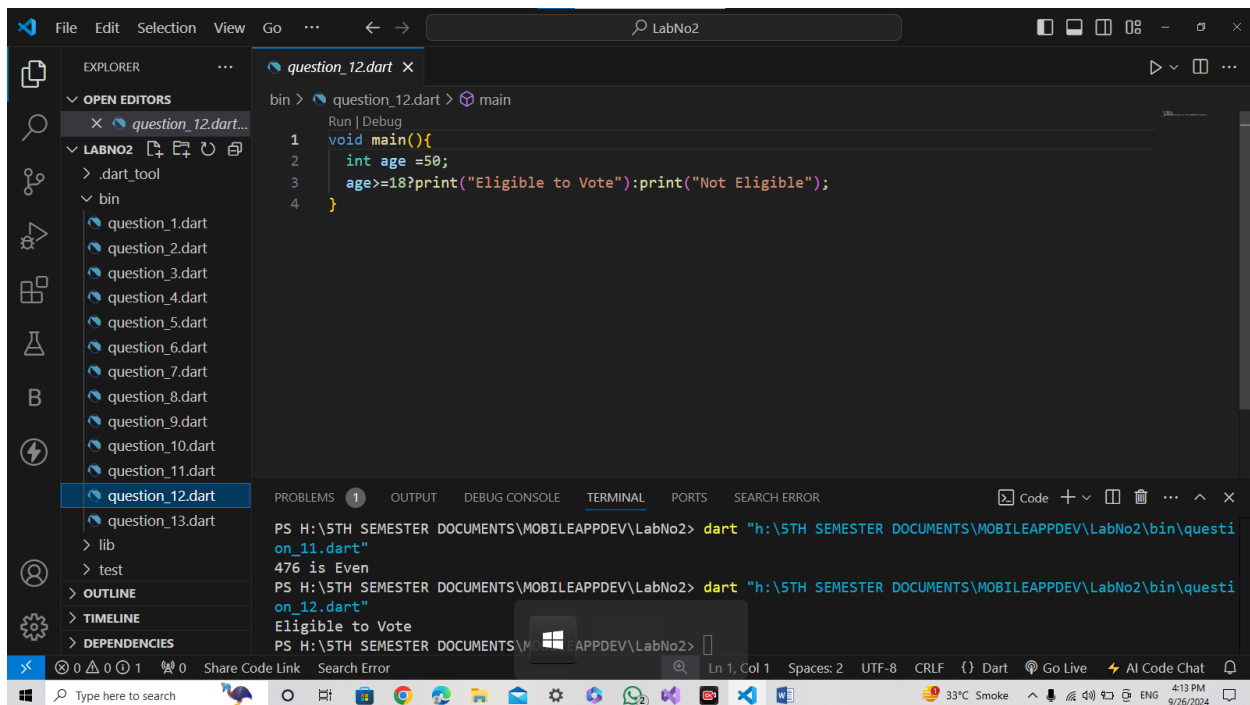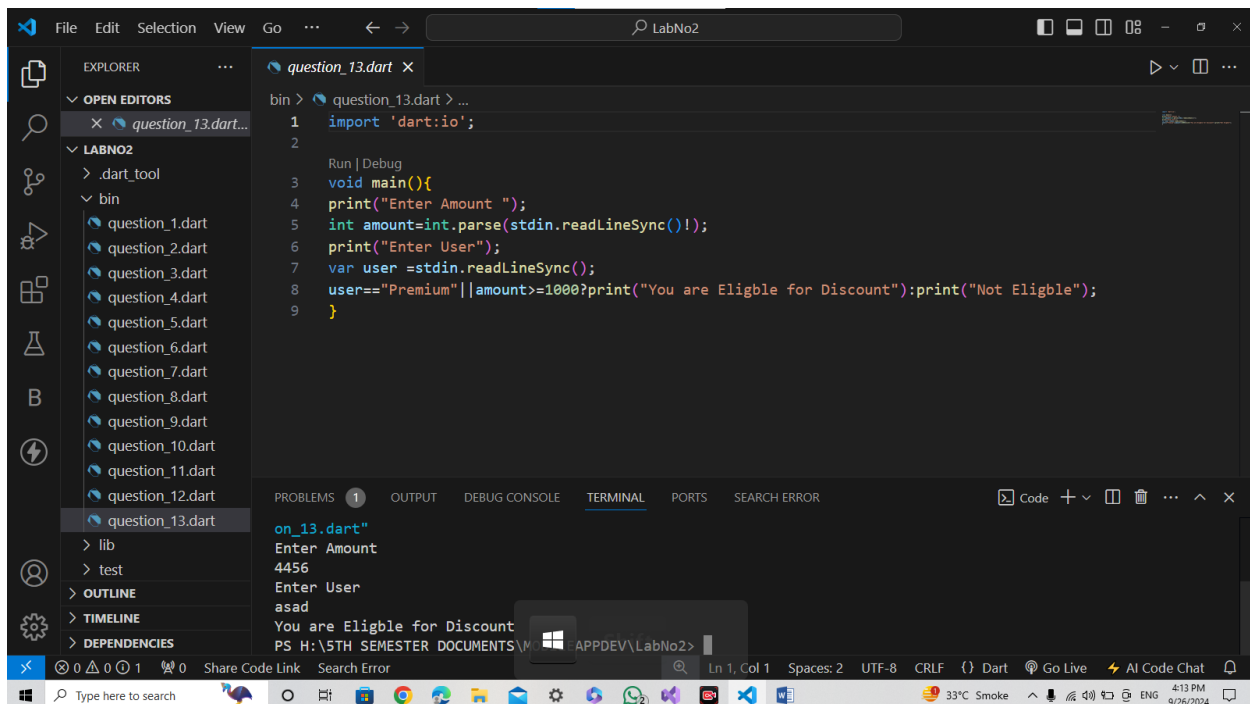
Q#13: Write a Dart program that checks if a user is eligible for a discount on a purchase, using the ternary operator.

```dart
import 'dart:io';

void main(){
  print("Enter Amount ");
  int amount=int.parse(stdin.readLineSync()!);
  print("Enter User");
  var user =stdin.readLineSync();
  user=="Premium"||amount>=1000?print("You are Eligble for Discount"):print("Not Eligble");
}
```

Terminal output:

```
on_13.dart"
Enter Amount
4456
Enter User
asad
You are Eligble for Discount
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```