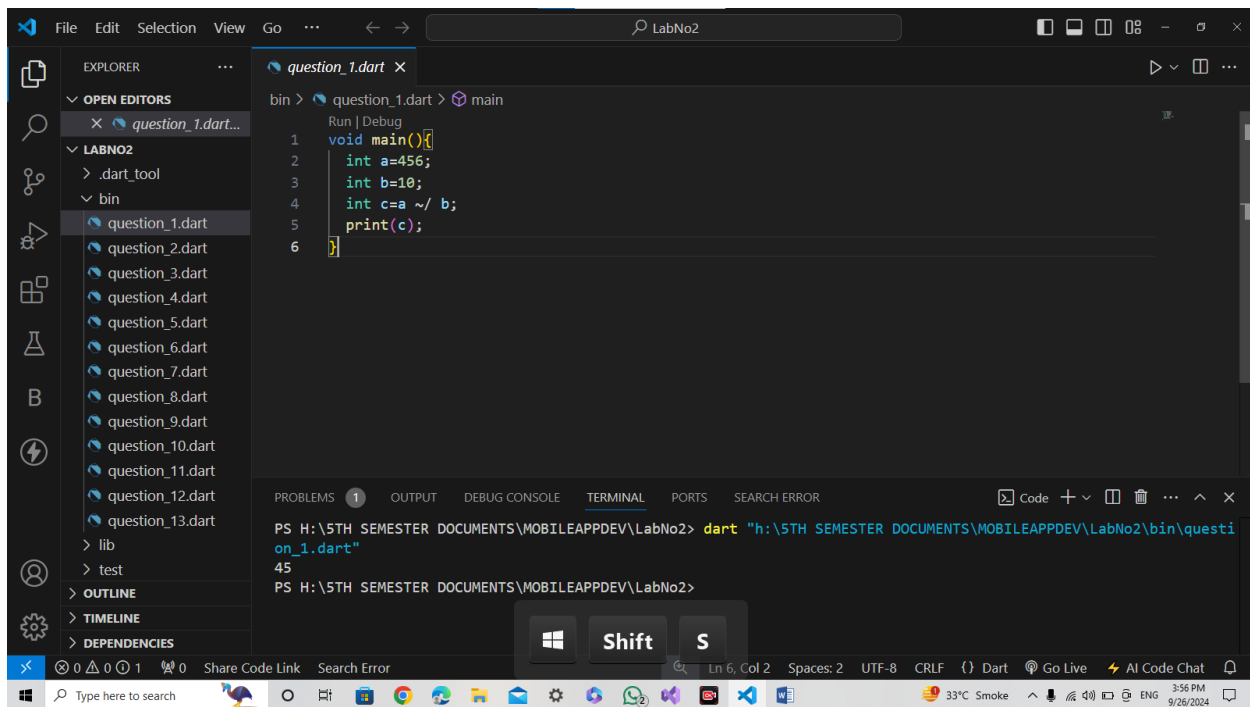


Mobile App Development

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.



The screenshot shows a code editor with a Dart file named `question_1.dart`. The code defines a `main` function that initializes two integers, `a=456` and `b=10`, calculates their integer division `c=a ~/ b`, and prints the result `c`. The output of the program is `45`.

```
bin > question_1.dart > main
Run | Debug
1 void main(){
2   int a=456;
3   int b=10;
4   int c=a ~/ b;
5   print(c);
6 }
```

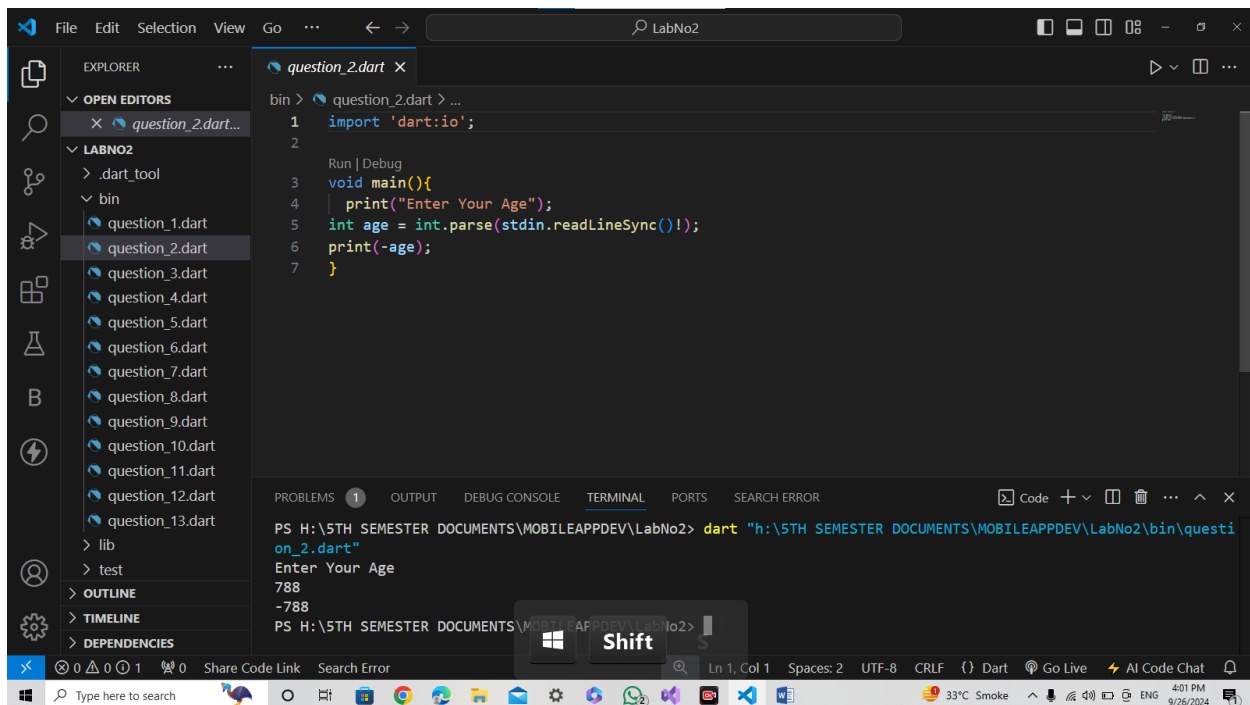
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_1.dart"
45
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

Ln 6, Col 2 Spaces: 2 UTF-8 CRLF {} Dart Go Live AI Code Chat

Type here to search

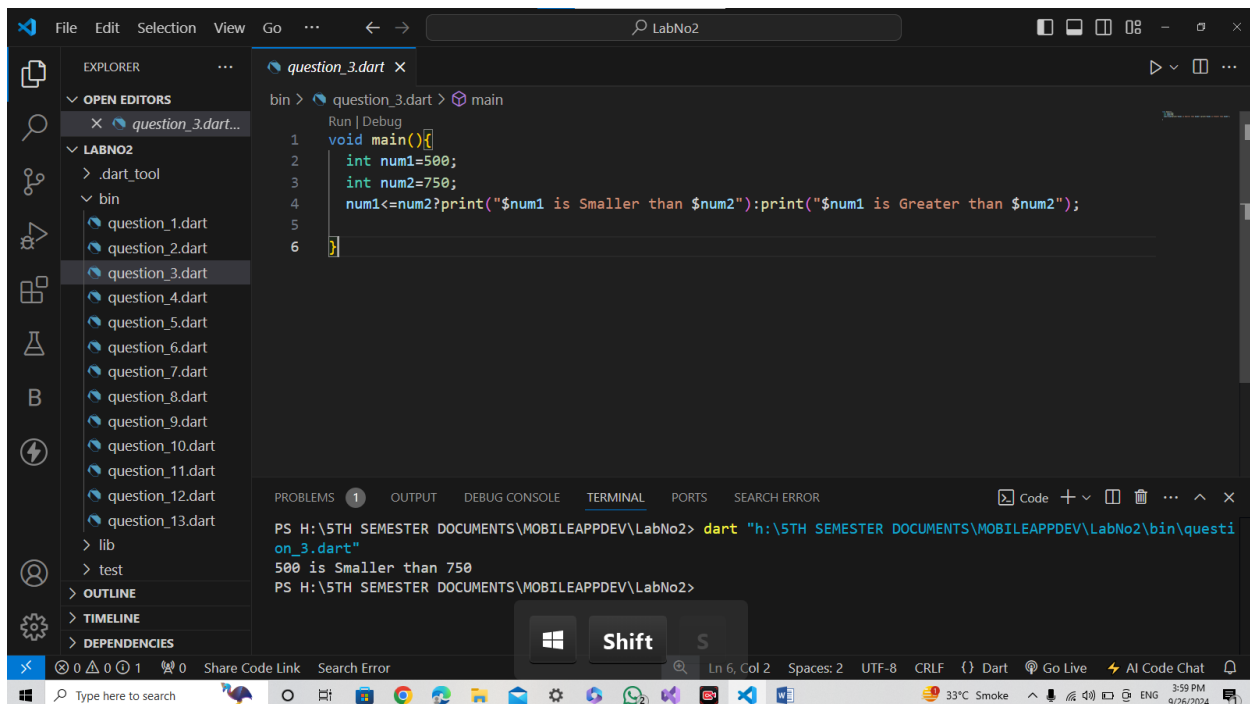
Q#2: Write a Dart program that takes an integer as input (initialize) and prints its negative value using the unary minus operator.



```
bin > question_2.dart > ...
1 import 'dart:io';
2
3 Run | Debug
4 void main(){
5   print("Enter Your Age");
6   int age = int.parse(stdin.readLineSync());
7   print(-age);
8 }
```

```
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>
```

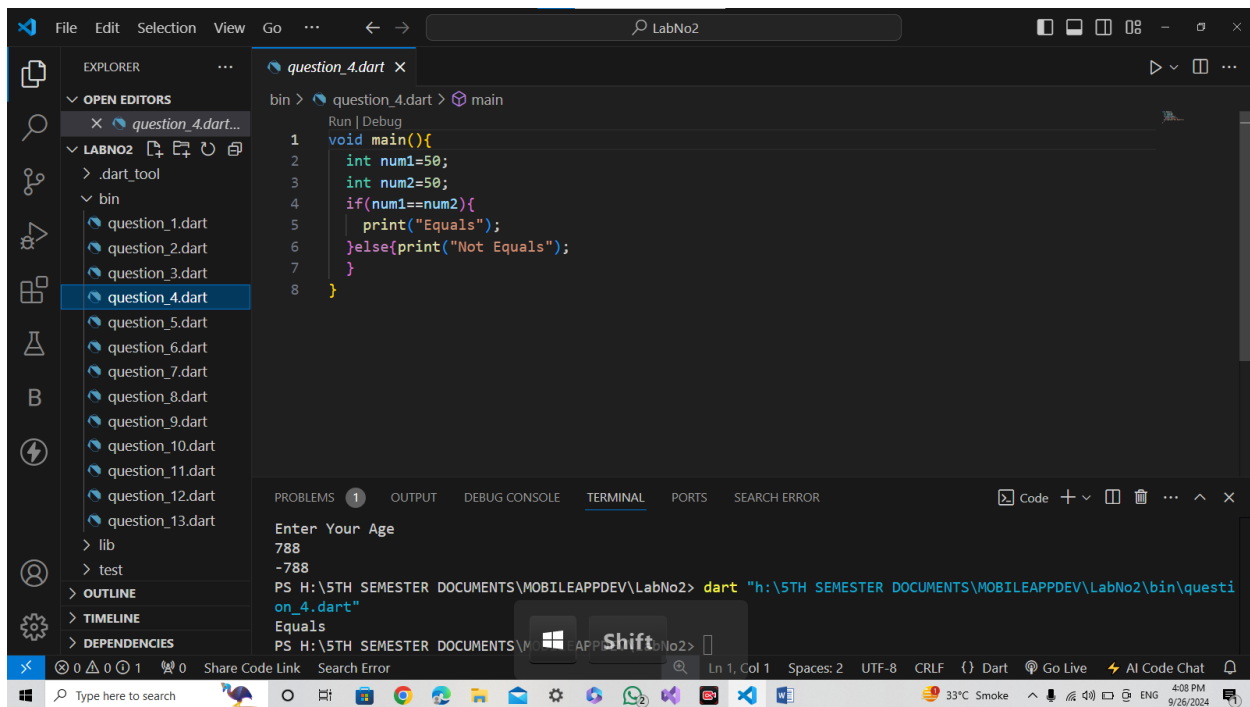
Q#3: Write a Dart program that compares two numbers and prints whether the first number is less than or equal to the second.



```
bin > question_3.dart > main
Run | Debug
1 void main(){
2   int num1=500;
3   int num2=750;
4   num1<=num2?print("$num1 is Smaller than $num2"):print("$num1 is Greater than $num2");
5 }
6 }
```

```
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.



```
File Edit Selection View Go ... LabNo2
```

```
EXPLORER
```

```
OPEN EDITORS
```

```
question_4.dart...
```

```
LABNO2
```

```
.dart_tool
```

```
bin
```

```
question_1.dart
```

```
question_2.dart
```

```
question_3.dart
```

```
question_4.dart
```

```
question_5.dart
```

```
question_6.dart
```

```
question_7.dart
```

```
question_8.dart
```

```
question_9.dart
```

```
question_10.dart
```

```
question_11.dart
```

```
question_12.dart
```

```
question_13.dart
```

```
lib
```

```
test
```

```
OUTLINE
```

```
TIMELINE
```

```
DEPENDENCIES
```

```
question_4.dart
```

```
bin > question_4.dart > main
```

```
Run | Debug
```

```
1 void main(){
```

```
2   int num1=50;
```

```
3   int num2=50;
```

```
4   if(num1==num2){
```

```
5     print("Equals");
```

```
6   }else{print("Not Equals");
```

```
7   }
```

```
8 }
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR
```

```
Enter Your Age
```

```
788
```

```
-788
```

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_4.dart"
```

```
Equals
```

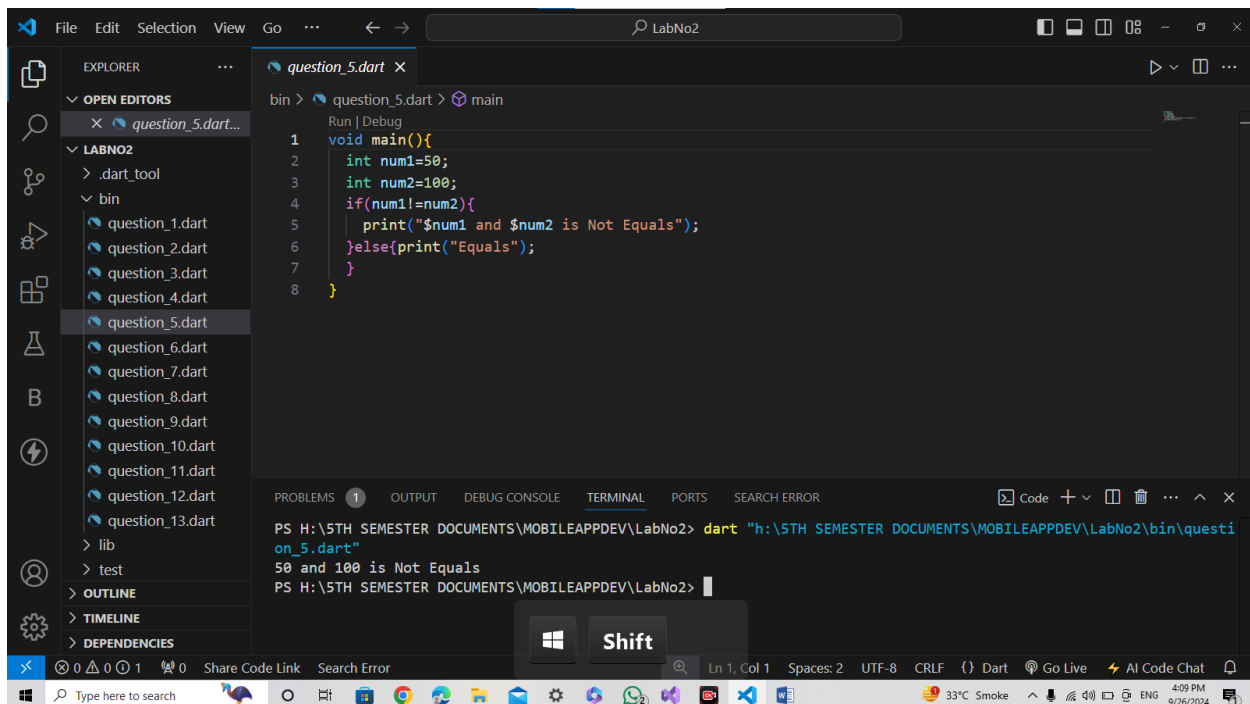
```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

```
Type here to search
```

```
33°C Smoke
```

```
4:08 PM 9/26/2024
```

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



```
File Edit Selection View Go ... LabNo2
```

```
EXPLORER
```

```
OPEN EDITORS
```

```
question_5.dart...
```

```
LABNO2
```

```
.dart_tool
```

```
bin
```

```
question_1.dart
```

```
question_2.dart
```

```
question_3.dart
```

```
question_4.dart
```

```
question_5.dart
```

```
question_6.dart
```

```
question_7.dart
```

```
question_8.dart
```

```
question_9.dart
```

```
question_10.dart
```

```
question_11.dart
```

```
question_12.dart
```

```
question_13.dart
```

```
lib
```

```
test
```

```
OUTLINE
```

```
TIMELINE
```

```
DEPENDENCIES
```

```
question_5.dart
```

```
bin > question_5.dart > main
```

```
Run | Debug
```

```
1 void main(){
```

```
2   int num1=50;
```

```
3   int num2=100;
```

```
4   if(num1!=num2){
```

```
5     print("$num1 and $num2 is Not Equals");
```

```
6   }else{print("Equals");
```

```
7   }
```

```
8 }
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR
```

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_5.dart"
```

```
50 and 100 is Not Equals
```

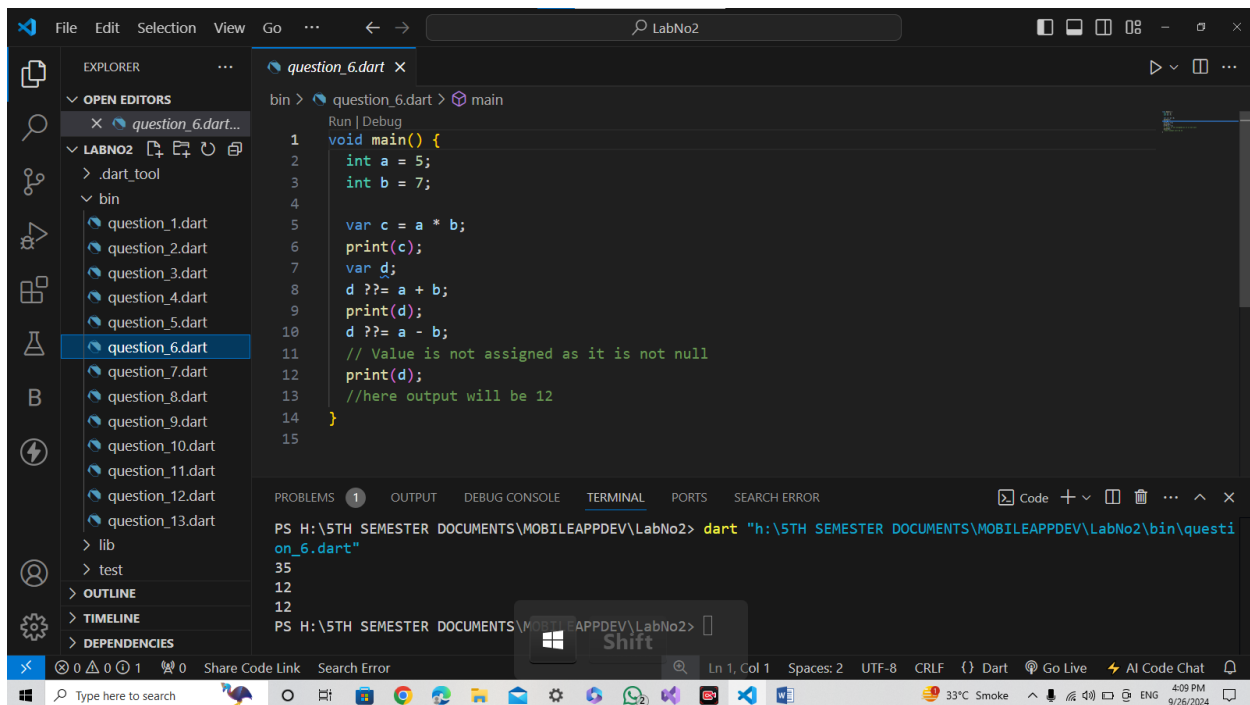
```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

```
Type here to search
```

```
33°C Smoke
```

```
4:09 PM 9/26/2024
```

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

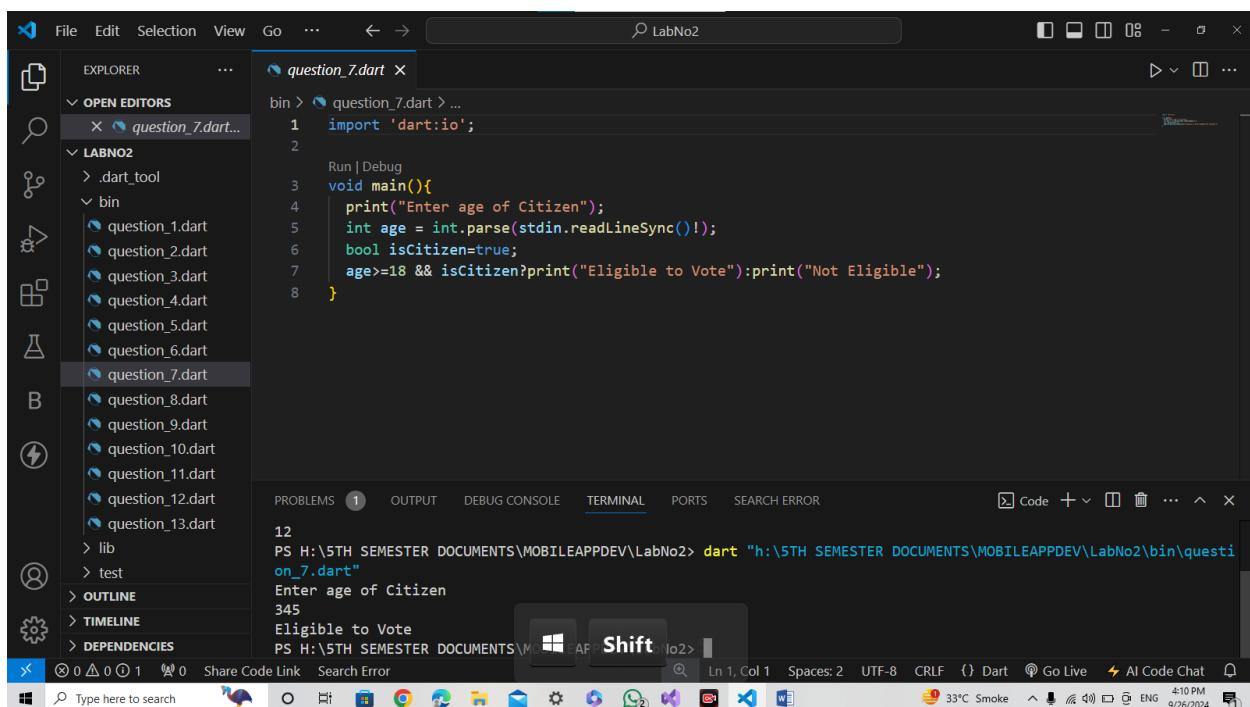


```
bin > question_6.dart > main
Run | Debug
1 void main() {
2   int a = 5;
3   int b = 7;
4
5   var c = a * b;
6   print(c);
7   var d;
8   d ??= a + b;
9   print(d);
10  d ??= a - b;
11  // Value is not assigned as it is not null
12  print(d);
13  //here output will be 12
14 }
15
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_6.dart"
35
12
12
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

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.

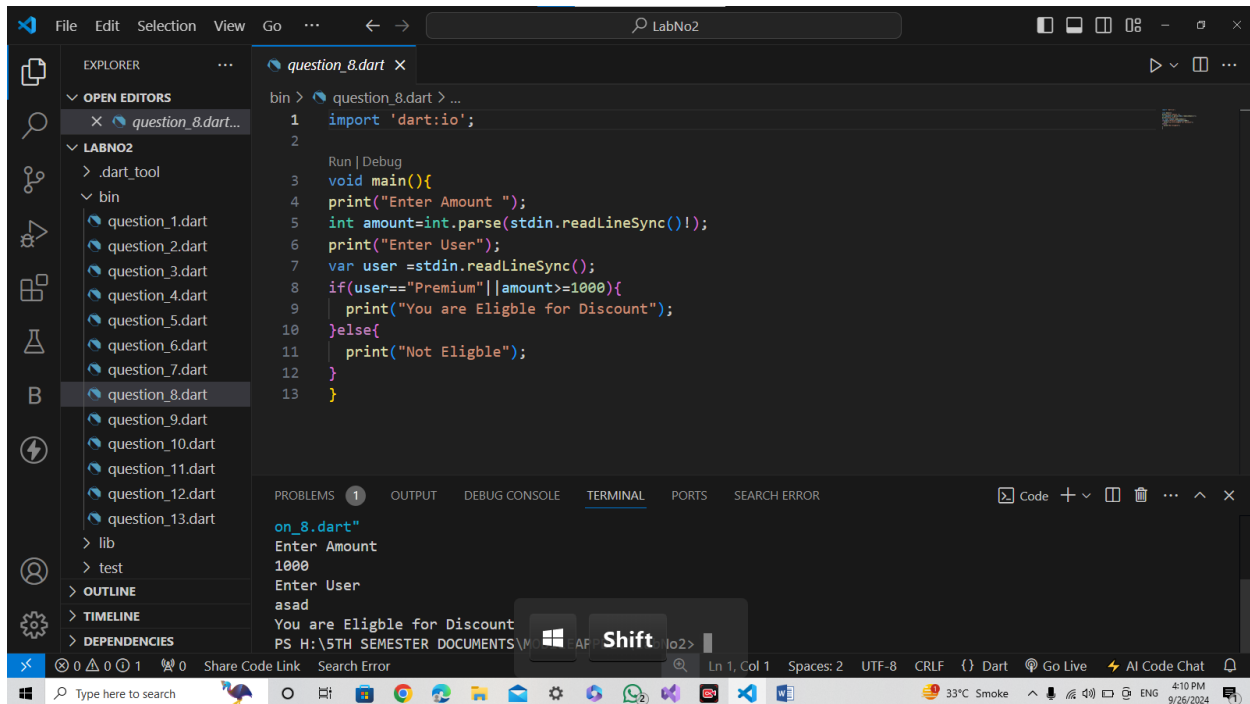


```
bin > question_7.dart > ...
1 import 'dart:io';
2
3 Run | Debug
4 void main(){
5   print("Enter age of Citizen");
6   int age = int.parse(stdin.readLineSync()!);
7   bool isCitizen=true;
8   age>=18 && isCitizen?print("Eligible to Vote"):print("Not Eligible");
9 }
10
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_7.dart"
Enter age of Citizen
345
Eligible to Vote
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

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.

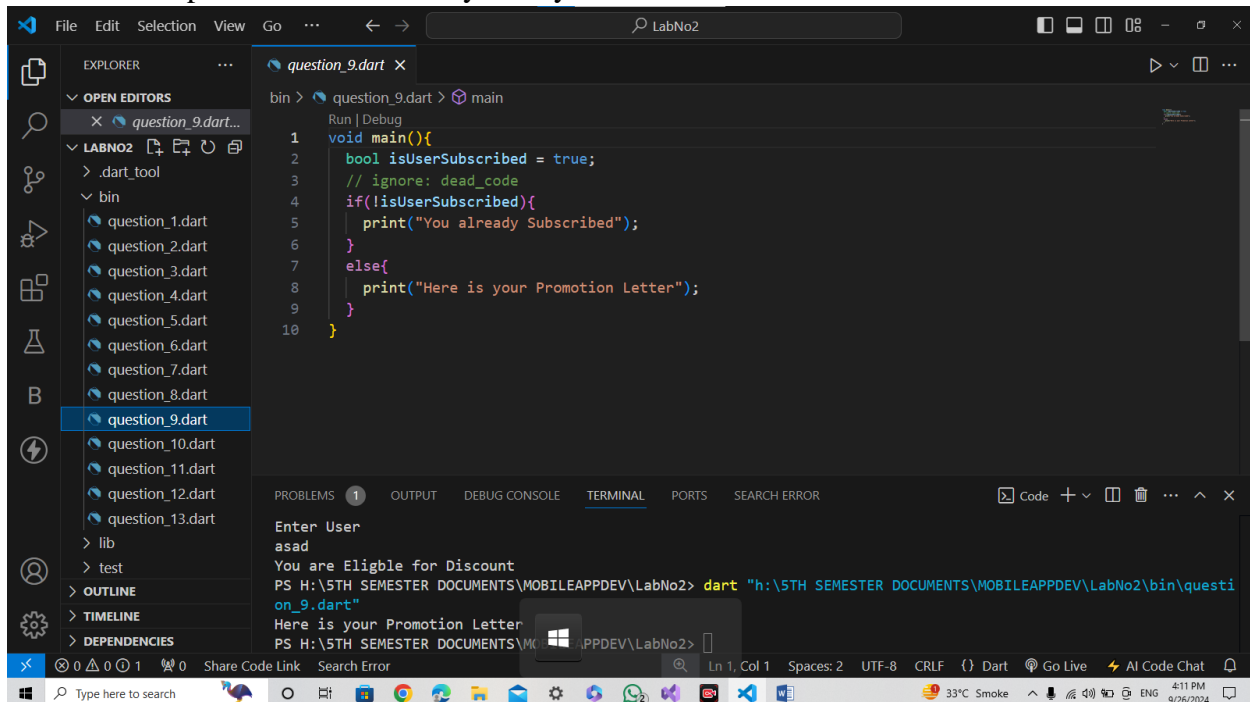


```
bin > question_8.dart > ...
1 import 'dart:io';
2
3 Run | Debug
4 void main(){
5   print("Enter Amount ");
6   int amount=int.parse(stdin.readLineSync());
7   print("Enter User");
8   var user =stdin.readLineSync();
9   if(user=="Premium"||amount>=1000){
10    print("You are Eligble for Discount");
11   }else{
12    print("Not Eligble");
13   }
14 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR

on_8.dart"
Enter Amount
1000
Enter User
asad
You are Eligble for Discount
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>

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.

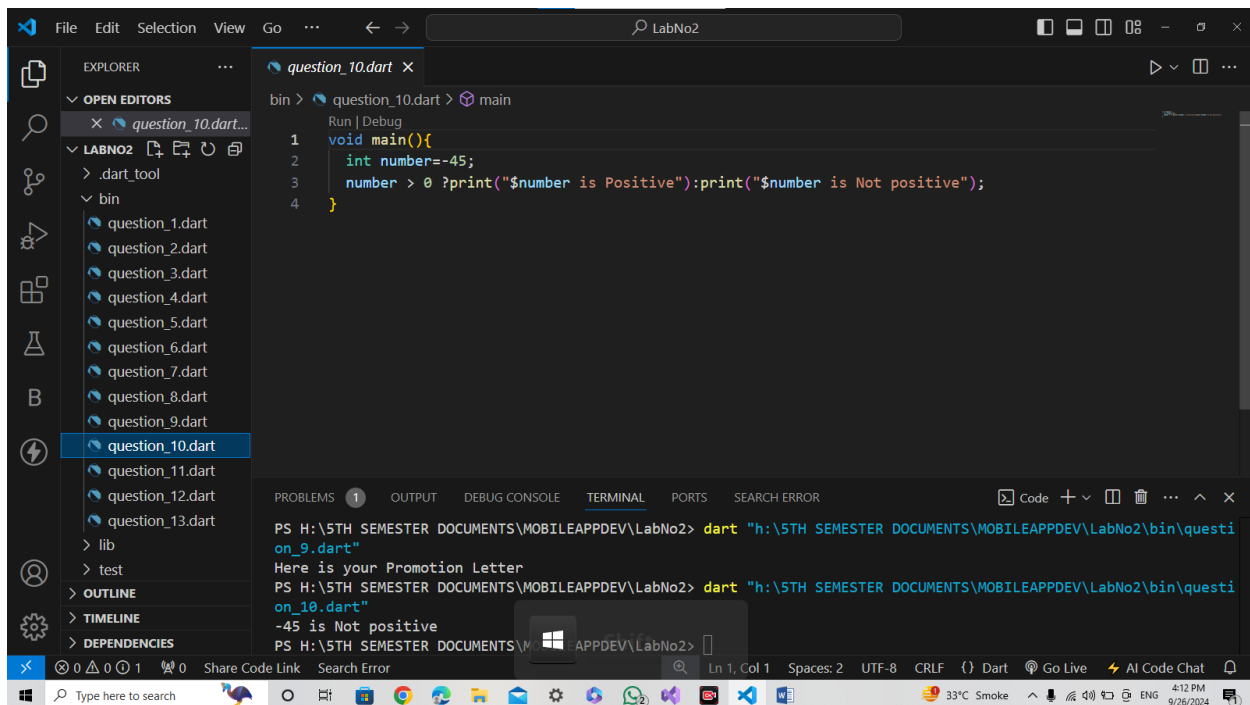


```
bin > question_9.dart > main
1 void main(){
2   bool isUserSubscribed = true;
3   // ignore: dead_code
4   if(!isUserSubscribed){
5     print("You already Subscribed");
6   }
7   else{
8     print("Here is your Promotion Letter");
9   }
10 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR

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\MOBILEAPPDEV\LabNo2>

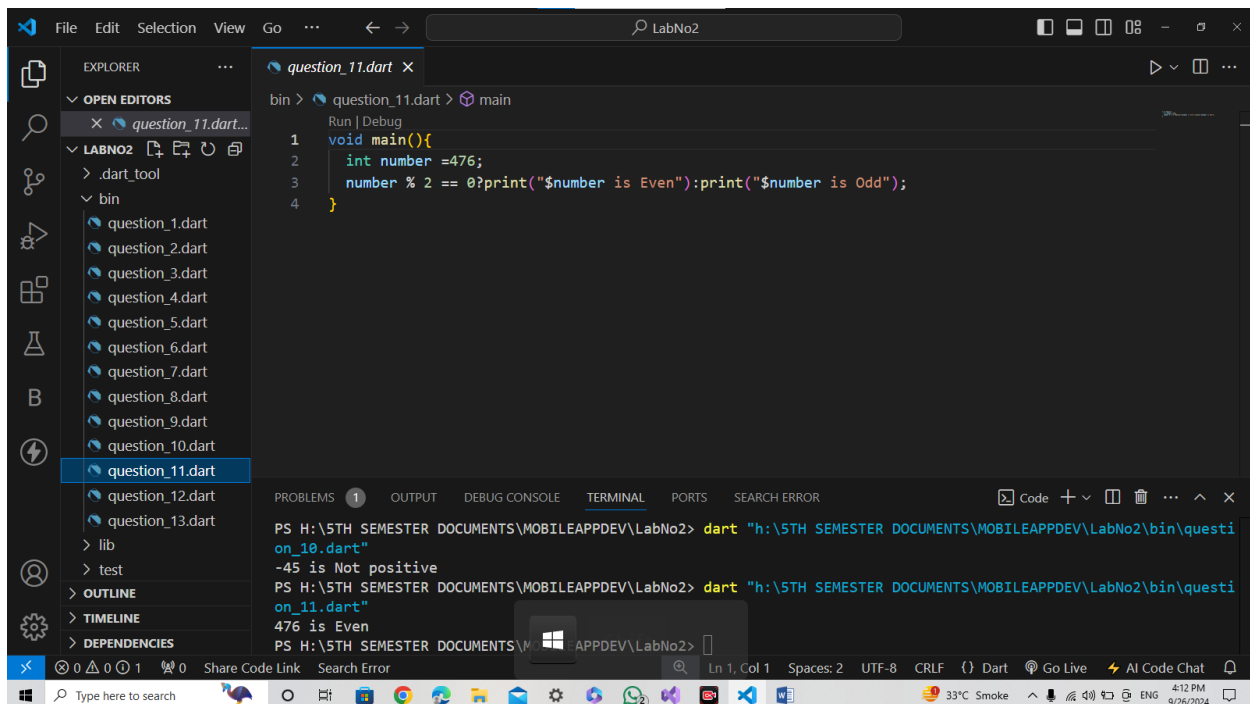
Q#10: Write a Dart program that determines whether a given number is positive or negative using the ternary operator.



```
bin > question_10.dart > main
Run | Debug
1 void main(){
2   int number=-45;
3   number > 0 ?print("$number is Positive"):print("$number is Not positive");
4 }
```

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_9.dart"
Here is your Promotion Letter
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_10.dart"
-45 is Not positive
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>
```

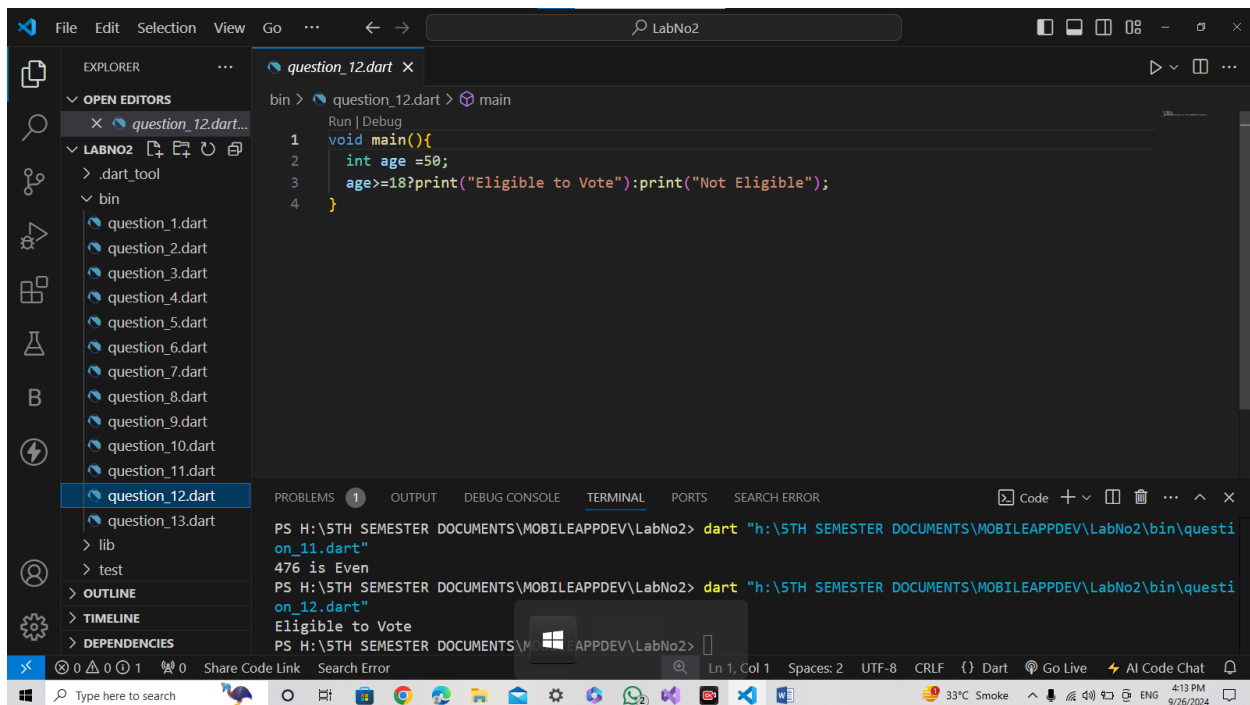
Q#11: Write a Dart program that determines whether a given number is even or odd using the ternary operator.



```
bin > question_11.dart > main
Run | Debug
1 void main(){
2   int number =476;
3   number % 2 == 0?print("$number is Even"):print("$number is Odd");
4 }
```

```
PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_10.dart"
-45 is Not positive
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>
```

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



```
bin > question_12.dart > main
Run | Debug
1 void main(){
2   int age =50;
3   age>=18?print("Eligible to Vote"):print("Not Eligible");
4 }
```

PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2> dart "h:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2\bin\question_11.dart"

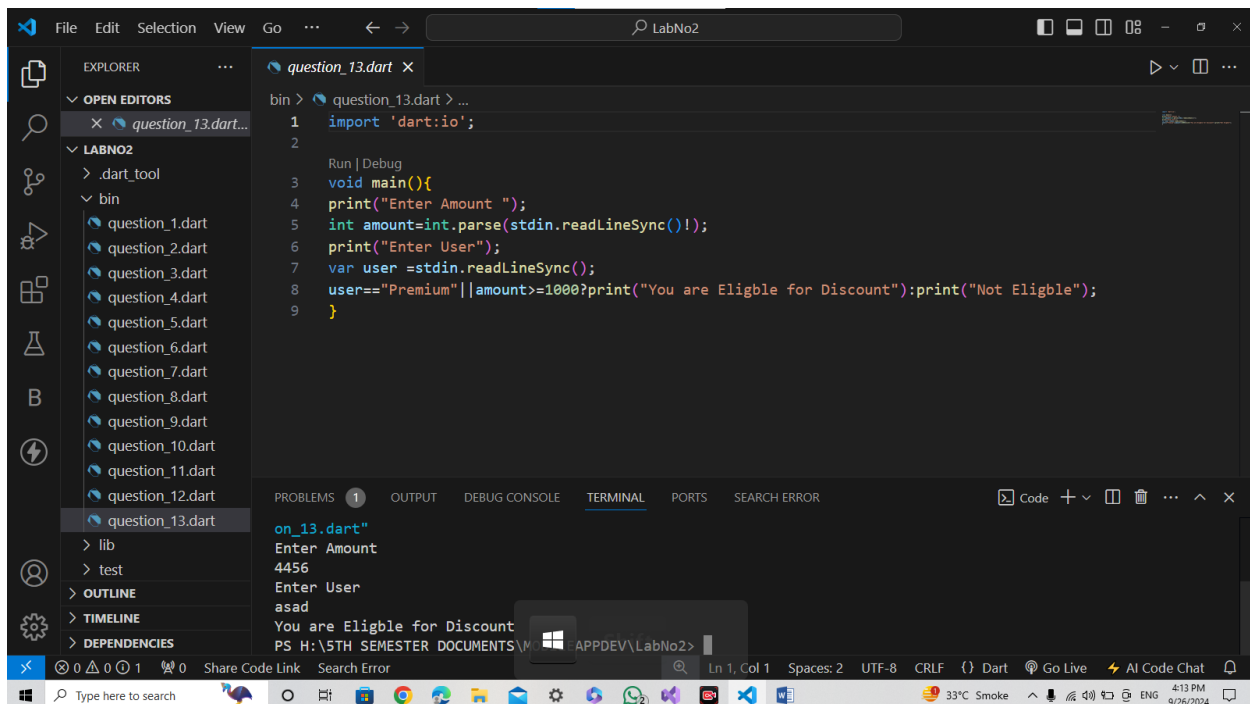
476 is Even

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.



```
bin > question_13.dart > ...
1 import 'dart:io';
2
3 void main(){
4   print("Enter Amount ");
5   int amount=int.parse(stdin.readLineSync()!);
6   print("Enter User");
7   var user =stdin.readLineSync();
8   user=="Premium"||amount>=1000?print("You are Eligible for Discount"):print("Not Eligible");
9 }
```

on_13.dart"

Enter Amount

4456

Enter User

asad

You are Eligible for Discount

PS H:\5TH SEMESTER DOCUMENTS\MOBILEAPPDEV\LabNo2>