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Course: Flutter App Development

Assignment no 4

Take two variables and store age then using if/else condition to determine oldest and youngest among them.

```
void main() {
  int age1 = 25;
  int age2 = 30;

  if (age1 > age2) {
    print("The oldest person is $age1 years old.");
    print("The youngest person is $age2 years old.");
  } else if (age2 > age1) {
    print("The oldest person is $age2 years old.");
    print("The youngest person is $age1 years old.");
}
}
```

```
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main.dart
The oldest person is 30 years old.
The youngest person is 25 years old.
```

Create two integer variables length and breadth and assign values then check if they are square values or rectangle values.
i.e.: if both values are equal then it's square otherwise rectangle.

```
void main() {

  int length = 5;
  int breadth = 7;

  if (length == breadth) {
    print("It's a square.");
  } else {
    print("It's a rectangle.");
  }
}
```

```
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main2.dart
It's a rectangle.
PS C:\Users\mujee\OneDrive\Desktop\Dart>
```

A student will not be allowed to sit in exam if his/her attendance is less than 75%. Create integer variables and assign value:
Number of classes held = 16,
Number of classes attended = 10,
And print percentage of class attended.
Is student is allowed to sit in exam or not?

```
void main(){
  int classheld = 16;
  int classattend = 10;
  double attenperc = (classattend/classheld)*100;
  print('Percentage of Class attendance is : $attenperc');
  if(attenperc>=75){
      print('Student is allow to sit in the Exam');
  }
  else{
    print('You are not allowed to sit in the exam');
  }
}
```

```
Percentage of Class attendance is : 62.5
You are not allowed to sit in the exam
PS C:\Users\mujee\OneDrive\Desktop\Dart>
```

Create integer variable assign any year to it and check if a year is leap year or not.
If a year is divisible by 4 then it is leap year but if the year is century year like 2000, 1900, 2100 then it must be divisible by 400.
i.e: Use % (modulus) operator.

```
void main(){
  int year = 1998;
  if((year % 4==0 ) || (year % 400 ==0)){
    print('Its a Leap Year ');
  }
  else{
      print('Its not a leap year');
  }

}
```

```
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main1.dart
Its not a leap year
```

Write a program to read temperature in centigrade and display a suitable message according to temperature:
You have num variable temperature = 42;
Now print the message according to temperature:
temp < 0 then Freezing weather
temp 0-10 then Very Cold weather
temp 10-20 then Cold weather
temp 20-30 then Normal in Temp
temp 30-40 then Its Hot
temp >=40 then Its Very Hot

```dart
void main(){
  num temp = 42;
  if(temp<0){
    print('Its freezing Weather : $temp');
  }
  else if (temp>0 && temp<=10){
    print('Its Very Cold weather : $temp');
  }
  else if (temp>10 && temp<=20){
    print('Its Cold weather : $temp');
  }
  else if (temp>20 && temp<=30){
    print('Its Normal weather : $temp');
  }
  else if (temp>30 && temp<=40){
    print('Its Very Hot weather : $temp');
  }
  else if (temp>=40){
    print('Its Very Hot The Temperature is  $temp Centigrade');
  }
}
```

```
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main2.dart
Its Very Hot The Temperature is  42 Centigrade
```

**Write a Dart program that prompts the user to input their age.
Based on their age, the program should
print whether they are a child (0-12 years),
teenager (13-19 years), adult (20-59 years),
or senior (60+ years) using if-else statements.**

```dart
import 'dart:io';

void main() {
  stdout.write('Please enter your age: ');
  int age = int.parse(stdin.readLineSync() ?? '');

    if (age >= 0 && age <= 12) {
      print('You are a child.');
    } else if (age >= 13 && age <= 19) {
      print('You are a teenager.');
    } else if (age >= 20 && age <= 59) {
      print('You are an adult.');
    } else {
      print('You are a senior.');
    }
  }
```

```
Please enter your age: 62
You are a senior.
```

Create a list of names and print all names using list.

```dart
void main(){
List <String> mylist=['Mujeeb','Safi','Danial'];
print([mylist]);
}
```

```
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main4.dart
[[Mujeeb, Safi, Danial]]
```

Create a Dart program that acts as a basic ATM machine.
Ask the user for their current balance and the amount they wish to withdraw. E
Ensure the withdrawal amount doesn't exceed the balance and display the remaining balance using if-else statements.

```dart
import 'dart:io';

void main() {

  print('Welcome to the ATM machine!');
  num currentBalance = 50000;

  stdout.write('Enter the amount you wish to withdraw: ');
  double withdrawalAmount = double.parse(stdin.readLineSync() ?? '0');

  // Check if withdrawal amount exceeds the current balance
  if (withdrawalAmount <= 0) {
    print('Invalid withdrawal amount.');
  } else if (withdrawalAmount > currentBalance) {
    print('Insufficient funds. Withdrawal amount exceeds your current balance.');
  } else {
    // Deduct the withdrawal amount from the current balance
    double remainingBalance = currentBalance - withdrawalAmount;
    print('Withdrawal successful.');
    print('Your Remaining Balance is : $remainingBalance');
  }
}
```

```
Welcome to the ATM machine!
Enter the amount you wish to withdraw: 30000
Withdrawal successful.
Your Remaining Balance is : 20000.0
PS C:\Users\mujee\OneDrive\Desktop\Dart> 50000
50000
PS C:\Users\mujee\OneDrive\Desktop\Dart> dart main5.dart
Welcome to the ATM machine!
Enter the amount you wish to withdraw: 50000
Withdrawal successful.
Your Remaining Balance is : 0.0
PS C:\Users\mujee\OneDrive\Desktop\Dart>
```