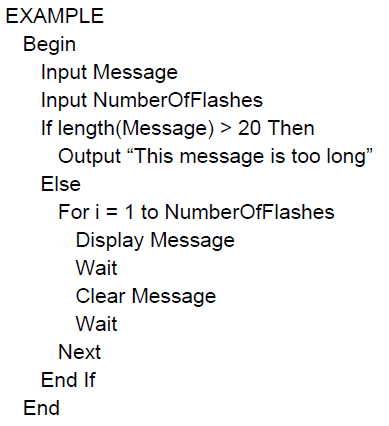
* 1. An error in the rules/grammar of the language with any suitable example.
  2. Error messages/translator diagnostics produced when translating/by the compiler or on the fly while writing code. Attempts to tell you what the error is and indicate where the error is/line numbers/underlines. Editor allows you to enter the corrected code.
  3. 0, 12, 4.
  4. Set of test data: 1 1 3 / 1 1 4 / 1 1 5 / 1 1 6 / 2 2 5 / 2 2 6  
     Expected output: -1 -2 -3 -4 -1 -2
  5. A data structure/collection of several variables under one name. Each individual variable is given an index by which it is referred within the array.
  6. Data type: Integer. Reason: A dice roll is always a whole number between 1 and 6.   
     Size: 3. Reason: one element is needed for each dice.
  7. Example (also accept similar with FOR-NEXT loop)  
       
     **BEGIN RollTheDice  
      i = 1  
      WHILE i <= 3  
      DiceRoll(i) = Random No**

**i = i + 1  
 END WHILE  
END**

* + 1. A name/symbol which represents a value is a program. The value can change while the program is running.
    2. ORIGIN  
       String. Consists of more than one character.  
       Size  
       Integer. Consists of whole numbers.
  1. Dress A : 14  
     Dress B : 10  
     Dress C : 12
  2. Coins(4)=50, Coins(10)=0.
     1. The program is written to do something other than what the programmer intended
     2. It will only reset the first 9 elements / will not reset the 10th element. After setting Coins(9) = 0, i will become10 and the loop will stop. It should be UNTIL i > 10 / or other working correction
  3. Example:  
     **i = 1  
     total = 0  
     REPEAT  
      total = total + Coins(i)  
      i = i + 1  
     UNTIL i>10 or Coins(i)=0**  
     **OR:**  
     **total = 0  
     FOR i = 1 to 10  
      total = total + Coins(i)  
     NEXT i**  
     1. Pi
     2. WheelSize & Circumference
     3. The value of a constant cannot be changed once the program is running (can only be set at design time). The value of a variable can change as the programming is running and has no value at design time.
  4. An integer is a whole number. A real number can include decimal fractions.

1. Example:  
   **BEGIN  
    Input RealAge  
    IF RealAge <= 2  
    DogYears = RealAge \* 12  
    ELSE  
    ExtraYears = RealAge – 2  
    DogYears = 24 + ExtraYears \* 6  
    END IF  
   END**   
   1. A name which is used to identify a memory location used to store a value which can change.
      1. A=4, B=9
      2. A=2, B=2
   2. Example:  
      **If A > B Then  
       Temp = A  
       A = B  
       B = Temp  
      End If**
   3. Message: String  
      Number of flashes: Integer
   4. 
   5. Network: string/text/alphanumeric  
      CallLength: real /float/single/double  
      SameNetwork: Boolean  
      TotalCalls: integer  
      RunningCost :currency/real  
      1. TotalCalls=11  
         RunningCosts=12.01
      2. TotalCalls=12  
         RunningCosts=12.51
   6. The keyword AND has been misspelled (ADN). This breaks the rules of the language and is a syntax error.
   7. It will produce the wrong result as it is adding instead of subtracting. This is a logic error.  
      1. The value of WordList(6) is “**mama**”
      2. The value of WordList(**9**) is “taso”
   8. EXAMPLE:  
      **INPUT SearchWord  
      I = 0  
      REPEAT  
       I = I + 1  
       IF WordList(I) = SearchWord THEN  
       OUTPUT “Word Found”  
       END IF  
      UNTIL I = 10**
   9. High level languages (HLL) are understood by humans. Computers/the CPU can only understand/execute machine code instructions. The translator converts a program in the HLL to an equivalent program in machine code.
   10. A compiler translates the entire program before execution. An interpreter translates one line, executes that line and then translates the next line. A compiler creates a list of errors after compilation. An interpreter stops after the first error. A compiler produces an independent executable file. An interpreted program needs the interpreter each time it is run. A compiled program is translated once. An interpreted program is translated each time it is run.