10 Write an algorithm for accepting the age of user and if the age is valid, check whether the user is a kid, a teenager, an adult or a senior citizen.

Here is an algorithm to accept the age of the user, check if it's valid, and determine whether the user is a kid, a teenager, an adult or a senior citizen:

1. Start
2. Declare a variable 'age' to store the user's age
3. Prompt the user to enter their age
4. Read the input value and assign it to the variable 'age'
5. Check if the age is valid (i.e. between 0 and 150, inclusive)
6. If the age is not valid, display an error message and end the program
7. If the age is valid, check which age group the user belongs to:
8. If age is less than 13, display "You are a kid"
9. Else if age is between 13 and 19, display "You are a teenager"
10. Else if age is between 20 and 59, display "You are an adult"
11. Else display "You are a senior citizen"
12. End

9 Write an algorithm for accepting three numbers and display the highest number among the three numbers.

Here is an algorithm to accept three numbers and display the highest number among them:

1. Start
2. Declare three variables 'num1', 'num2', and 'num3' to store the input numbers
3. Prompt the user to enter the value for variable 'num1'
4. Read the input value and assign it to the variable 'num1'
5. Prompt the user to enter the value for variable 'num2'
6. Read the input value and assign it to the variable 'num2'
7. Prompt the user to enter the value for variable 'num3'
8. Read the input value and assign it to the variable 'num3'
9. Check which number is the highest among the three numbers
10. If 'num1' is greater than 'num2' and 'num3', display "The highest number is: num1"
11. Else if 'num2' is greater than 'num1' and 'num3', display "The highest number is: num2"
12. Else display "The highest number is: num3"
13. End

8

Write an algorithm for accepting a character and then display whether it is a vowel or a constant.

Here is an algorithm to accept a character and then display whether it is a vowel or a consonant:

1. Start
2. Declare a variable 'ch' to store the input character
3. Prompt the user to enter a character
4. Read the input character and assign it to the variable 'ch'
5. Check if 'ch' is a vowel (i.e. 'a', 'e', 'i', 'o', or 'u')
6. If 'ch' is a vowel, display "The entered character is a vowel."
7. If 'ch' is not a vowel, display "The entered character is a consonant."
8. End

7 Write an algorithm for accepting the distance and speed values for a particular journey, calculate the time taken for the journey and display the same

Here is an algorithm to accept the distance and speed values for a particular journey, calculate the time taken for the journey and display the same:

1. Start
2. Declare two variables 'distance' and 'speed'
3. Prompt the user to enter the value for the variable 'distance'
4. Read the input value and assign it to the variable 'distance'
5. Prompt the user to enter the value for the variable 'speed'
6. Read the input value and assign it to the variable 'speed'
7. Calculate the time taken for the journey using the formula 'time = distance / speed'
8. Display the value of time taken for the journey
9. End

6

Write an algorithm for calculating the area of rectangle and square separately.

Here is an algorithm to calculate the area of a rectangle and square separately:

1. Start
2. Declare two variables 'length' and 'width' for rectangle and a variable 'side' for square
3. Prompt the user to enter the value for variable 'length'
4. Read the input value and assign it to the variable 'length'
5. Prompt the user to enter the value for variable 'width'
6. Read the input value and assign it to the variable 'width'
7. Calculate the area of rectangle using the formula 'area = length \* width'
8. Display the value of area
9. Prompt the user to enter the value for variable 'side'
10. Read the input value and assign it to the variable 'side'
11. Calculate the area of square using the formula 'area = side \* side'
12. Display the value of area
13. End

5 Write an algorithm for accepting two numbers and display the highest number among two.. accepts

Here is an algorithm to accept two numbers and display the highest number among them:

1. Start
2. Declare two variables 'num1' and 'num2'
3. Prompt the user to enter the value for the variable 'num1'
4. Read the input value and assign it to the variable 'num1'
5. Prompt the user to enter the value for the variable 'num2'
6. Read the input value and assign it to the variable 'num2'
7. Check if 'num1' is greater than 'num2'
8. If 'num1' is greater than 'num2', display 'num1' is the highest number
9. If 'num2' is greater than 'num1', display 'num2' is the highest number
10. If both the numbers are equal, display 'num1' and 'num2' are equal
11. End

4 Write an algorithm for accepting a number and display the whether it is odd or even.

Here is an algorithm to accept a number and display whether it is odd or even:

1. Start
2. Declare a variable 'num'
3. Prompt the user to enter the value for the variable 'num'
4. Read the input value and assign it to the variable 'num'
5. Check if the remainder of 'num' divided by 2 is equal to zero
6. If the remainder is equal to zero, display 'num' is even
7. If the remainder is not equal to zero, display 'num' is odd
8. End

3 Write an algorithm for accepting five numbers and display the sum and average of the numbers.

Here is an algorithm to accept five numbers and display the sum and average of the numbers:

1. Start
2. Declare five variables 'num1', 'num2', 'num3', 'num4', and 'num5'
3. Prompt the user to enter the value for variable 'num1'
4. Read the input value and assign it to the variable 'num1'
5. Prompt the user to enter the value for variable 'num2'
6. Read the input value and assign it to the variable 'num2'
7. Prompt the user to enter the value for variable 'num3'
8. Read the input value and assign it to the variable 'num3'
9. Prompt the user to enter the value for variable 'num4'
10. Read the input value and assign it to the variable 'num4'
11. Prompt the user to enter the value for variable 'num5'
12. Read the input value and assign it to the variable 'num5'
13. Calculate the sum of the five numbers and assign it to a variable 'sum'
14. Calculate the average of the five numbers and assign it to a variable 'avg'
15. Display the value of 'sum' and 'avg'
16. End

2 Write an algorithm for accepting distance in kilometers, convert it into meters and display the result.

Here is an algorithm to accept distance in kilometers, convert it into meters, and display the result:

1. Start
2. Declare a variable 'distanceKm'
3. Prompt the user to enter the value for the variable 'distanceKm'
4. Read the input value and assign it to the variable 'distanceKm'
5. Convert the distance from kilometers to meters by multiplying it by 1000 and assign the result to a variable 'distanceM'
6. Display the value of distanceM
7. End

1

Write an algorithm for accepting two numbers, divide the first number by second and display their quotient.

Here is an algorithm to accept two numbers, divide the first number by the second number and display their quotient:

1. Start
2. Declare two variables 'numerator' and 'denominator'
3. Prompt the user to enter the value for the variable 'numerator'
4. Read the input value and assign it to the variable 'numerator'
5. Prompt the user to enter the value for the variable 'denominator'
6. Read the input value and assign it to the variable 'denominator'
7. If the denominator is equal to zero, then display an error message and go to step 3
8. Calculate the quotient by dividing numerator by denominator and assign it to a variable 'quotient'
9. Display the value of quotient
10. End