**Name:** Abdullah Memon

**Roll no:** 24k-2514

**Course:** Programming Fundamental (Lab)

Design a flowchart, Pseudocode, Algorithm to determine which of three provided numbers is the greatest.

# Algorithm:

* 1. Enter three random numbers a, b, c.
  2. Read those numbers.
  3. Compare a and b that which one is greater.
  4. Compare the greater number from a and b with number c for finding which one is greater.
  5. Display the greater number.

# Pseudocode:

1. Start
2. Display “Enter three numbers:”
3. Read numbers.
4. Compare “a number” with “b number”
5. If

a number>b number

Compare “a number” with “c number” If

Else

a number>c number

Display “a number is the greatest number” Else

Display” c number is the greatest number” Go to step 6.

Compare “b number” with “c number” If

1. End

b number>c number

Display “b number is the greatest number” Else

Display” c number is the greatest number”

# Flow Chart:

Start

Display

“Enter three numbers:”

Read numbers a, b, c

a>b && a>c

yes

Print a the greatest.

no

b>a && b>c

yes

Print b the greatest.

no

Print c the greatest.

End

1. Implement an algorithm where the user enters a number, and an appropriate month is Displayed.

# Algorithm:

* 1. Display a message to enter a number between one to twelve.
  2. Read the number.
  3. If
  4. If
  5. If
  6. If
  7. If
  8. If
  9. If
  10. If
  11. If

Number is 1.

Display the message “January”

Number is 2.

Display the message “February”

Number is 3.

Display the message “March”

Number is 4.

Display the message “April”

Number is 5.

Display the message” May”

Number is 6.

Display the message “June”

Number is 7.

Display the message “July”

Number is 8.

Display the message “August”

Number is 9.

Display the message “September”

* 1. If
  2. If
  3. If

Number is 10.

Display the message “October”

Number is 11.

Display the message “November”

Number is 12.

Display the message “December”

* 1. Else

Display the message “In valid number”.

1. Create pseudocode a small calculator which only does ‘+’ or ‘-

‘Operations. (Hint: Take three variable inputs with one being used for the operator)

# Pseudo code:

* 1. Start
  2. Display “Enter first number:”
  3. Read first number, a.
  4. Display “Enter second number:”
  5. Read first number, b.
  6. Display “Enter the operator being used:”
  7. Read operator, operator.
  8. If

operator= + Then, result= a+b

Display” The result is : ”, result.

* 1. Else If

operator= - Then, result= a-b

Display” The result is : ”, result.

* 1. Else

Display” invalid operator.”

* 1. End.

1. You are working at Toyota Indus Motors and want to assemble a car. Design a flowchart with proper process modules and decision structures to replicate a pipeline production.

Start

Receive Parts

no

Inspect Parts

Quality

yes

Receive Engine

Inspect Engine

Quality

no

yes

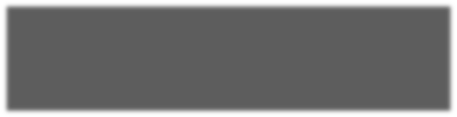
Choose Car Color

Inspect Color

Quality

no

yes



Car Ready

Test Ride

no

yes

Car Shipped to Toyota

Showroom

End

Firstly, assemble the parts Then, fix the engine Finally, color the car

1. Implement an algorithm for making a simple calculator with all the operators (+,-,\*, /, %).

# Algorithm:

* 1. Display a message for entering first number.
  2. Read the first number, a.
  3. Display a message for entering second number.
  4. Read the second number, b.
  5. Display a message for entering the operator being use.
  6. Read the operator, operator.
  7. If the operator= + Then,

result= a+b

Display the result, result.

* 1. Else If operator= - Then,

result= a-b

Display the result, result.

* 1. Else If operator= \* Then,

result= a\*b

Display the result, result.

* 1. Else If operator= / Then,

result= a/b

Display the result, result.

* 1. Else If operator= % Then,

result= a%b

Display the result, result.

* 1. Else display the message of invalid operator.