

Qs) 1 (PAC) to determine a triangle's area on its height and base.

Ans	Given Data : Height (H) Base (B)	Required Data: Area of Triangle
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Processing Req: Formula: $A_{\triangle} = \frac{1}{2} B \times H$ Put values of and Print it.	Alternative sol: Value of Base & Height can be constant or varied.
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Qs) 2 (IPO) Calculate a person's body Mass Index.

Input	Process	Module	Output
Weight (W) Height (H)	Enter the value of Weight & Height. Calculate (BMI) Print/Display End	Ref Read Calc Print End	Body Mass Index.

Q No 3) Pseudocode for a program that outputs the largest of three numbers.

Ans Start

Print "Enter three number"

Input num1, num2, num3

If num1 > num2 And num1 > num3 then,
Print "num1 is largest"

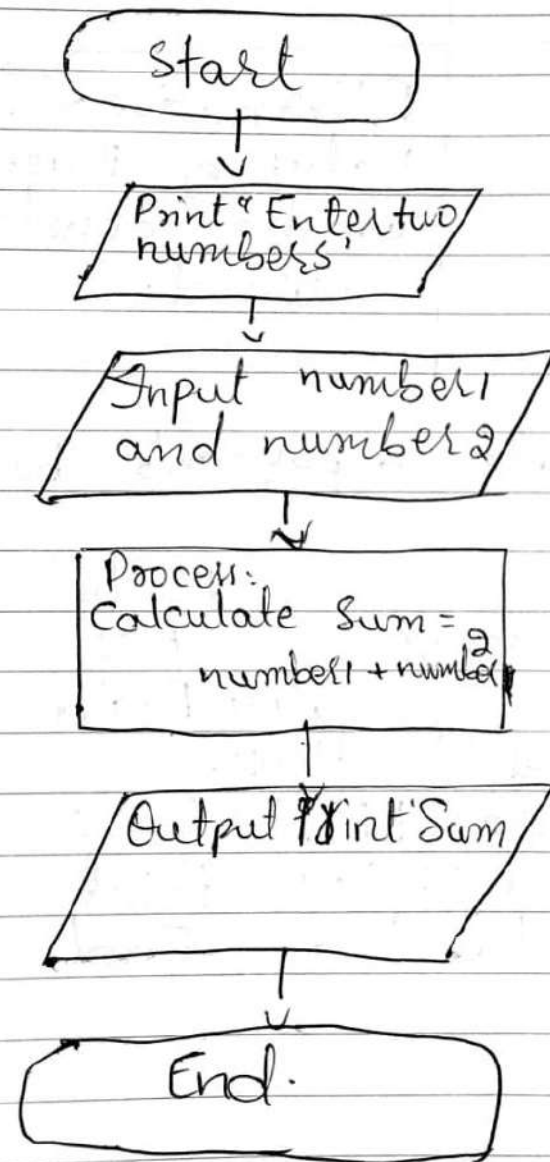
Elseif num2 > num1 And num2 > num3
Print "num2 is largest"

Else ~~not~~
Print "num3 is largest"

End

Qs 4) Draw flow chart that reads two numbers and print sum.

Ans.



Qnos

Algorithm to determine whether has passed or failed based on marks obt in three subjects:


Ans

Start
Input marks of sub1, sub2 and sub3
Calculate Average = $\text{Sub1} + \text{Sub2} + \text{Sub3} / 3$
If Average marks are greater than passing marks then passed @
otherwise failed.
End.

when  clicked

ask Write a number : and wait

set number ▼ to answer

if  number = 0 then

say Neutral for 2 seconds

else

if  number > 0 then

say Positive for 2 seconds

else

say Negative for 2 seconds

Scratch 3.31.1

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Code Costumes Sounds

Sensing

- touching mouse-pointer ?
- touching color ?
- color is touching ?
- distance to mouse-pointer
- ask What's your name? and wait
- answer
- key space pressed?
- mouse down?
- mouse x
- mouse y
- set drag mode draggable

when clicked

ask Enter the number : and wait

set Number to answer

if $\text{Number} \bmod 2 = 0$ then

say Even for 2 seconds

else

say Odd for 2 seconds

Sprite1: Number 23

Sprite Sprite1 x 0 y 0

Show Size 100 Direction 90

Stage

Backdrops

Scratch 3.31.1

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Code Costumes Sounds

Motion

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 0 y: 0
- glide 1 secs to random position
- glide 1 secs to x: 0 y: 0
- point in direction 90
- point towards mouse-pointer
- change x by 10

when clicked

ask Enter the Length: and wait

set Length to answer

ask Enter the width: and wait

set Width to answer

set Area to $\text{Length} \times \text{Width}$

set Add to $\text{Width} + \text{Length}$

set Perimeter to $2 \times \text{Add}$

say join Area join Area join Perimeter: Perimeter for 2 seconds

Length 2

Width 2

Sprite1: Area 4

Perimeter 8

Add 4

Sprite Sprite1

Size 100

Direction 90

Stage

Backdrops

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if [ ] then
else
wait until [ ]
repeat until [ ]
stop [all ▾]
when I start as a clone
create clone of [myself ▾]
delete this clone

```



when clicked

set ID to 0000

set Password to 1234

set Login to False

repeat until Login = true

ask Enter Id: and wait

if answer = 0000 then

ask Enter Pass: and wait

if answer = 1234 then

say Login Successful !!! for 2 seconds

set Login to true

else

say Either Id or pass is wrong for 2 seconds

stop this script

```

ID 0000
Password 1234
Login true

```



Sprite
Show ☒ ☐ Size Direction

Stage

Backdrops

QNO10 Pseudocode to determine whether a number is positive or negative.

As Start
 Print "Enter a number"
 Input number
 If number > 0 then,
 Print "number is positive"
 Else if number < 0
 Print "number is negative"
~~Else~~ Else
 Print "It is Zero"
 End.