

Qs) [PAC] To determine a triangle's area on its height and base.

Ans Given Data :

Height (H)
Base (B)

Required Data:

Area of Triangle

Processing Req:

Formula:

$$A_T = \frac{1}{2} B \times H$$

Put values & and
Print it.

Alternatives of P:

Value of Base & Height
can be constant or
varied.

Qs) [IPO] Calculate a person's body Mass Index.

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

(Qn3) Pseudocode for a program that outputs the largest of three numbers.

Ans Start

Point "Enter three number"

Input num1, num2, num3

If num1 > num2 And num1 > num3 then,

Point "num1 is largest"

Elseif num2 > num1 And num2 > num3

Point "num2 is largest"

Else ~~not~~

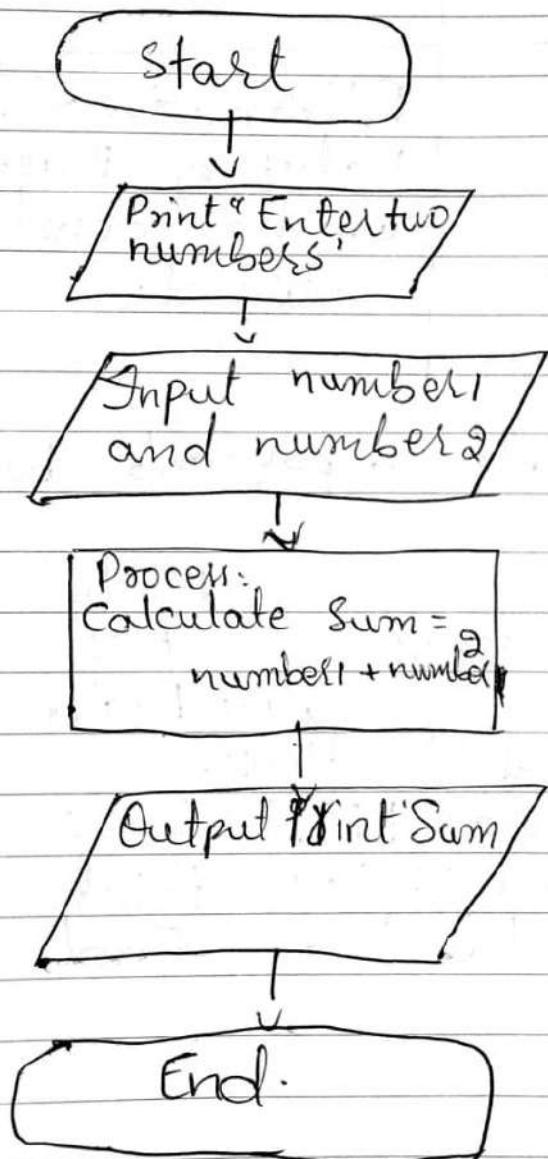
Point "num3 is largest"

Endif

End

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

Aus.



Ques

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

Ans

Start

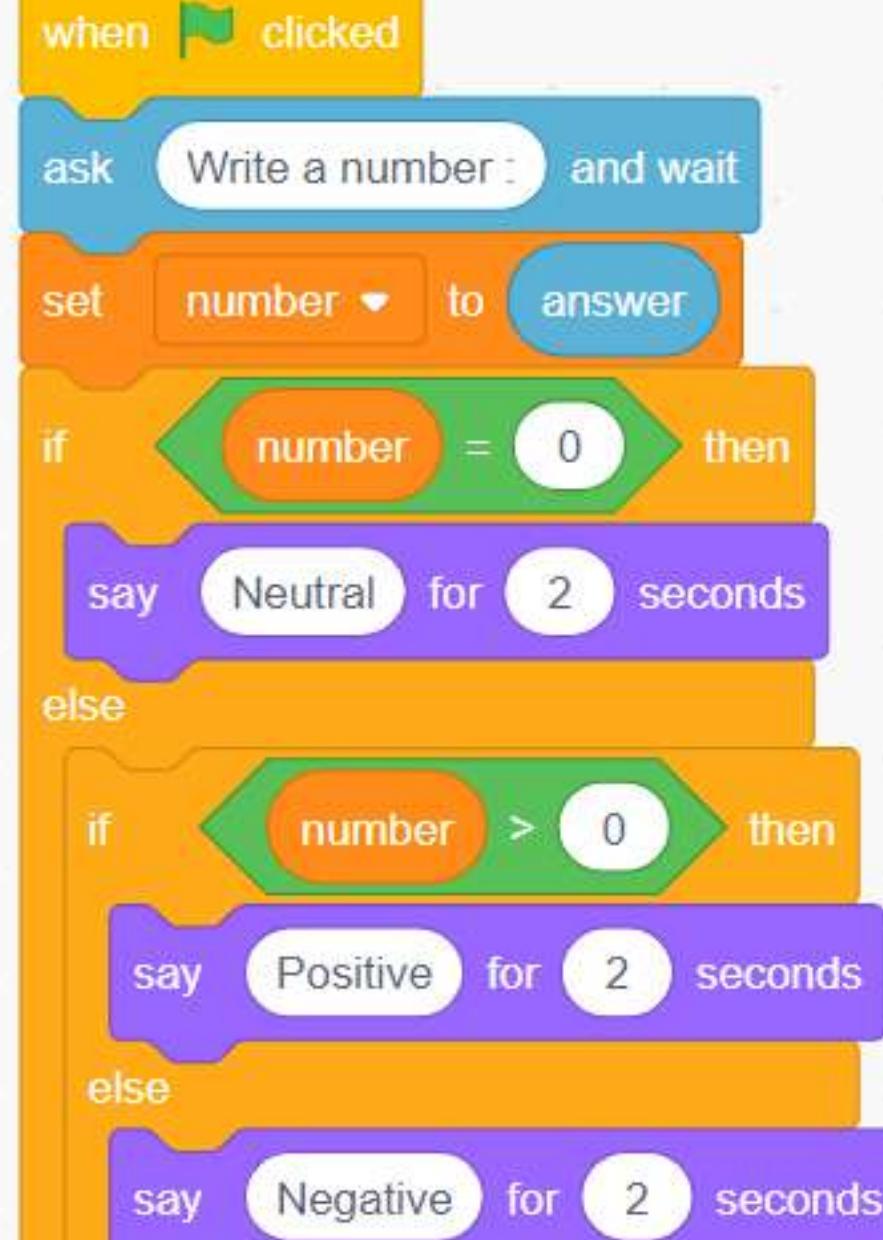
Input marks of sub1 , sub2 and sub3

Calculate Average = $\text{Sub1} + \text{Sub2} + \text{Sub3} / 3$

If average marks are greater than passing marks then passed
otherwise Failed.

End.

Question no :6



A Scratch script consisting of the following blocks:

- when green flag 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

SCRATCH Settings File Edit Scratch Project Tutorials Debug ?

Code Costumes Sounds

Sensing Motion Looks Sound Events Control Sensing Operators Variables My Blocks

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 green flag clicked

```
when green flag clicked
  ask [Enter the number :] and wait
  set Number to (answer)
  if (Number mod 2 = 0) then
    say [Even] for (2) seconds
  else
    say [Odd] for (2) seconds
```

Sprite1: Number 23

Question no : 7

Sprite1: Number 23

Sprite1 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)

Length 2
Width 2
Sprite1: Area 4
Perimeter 8
Add 4

Question No : 8

```

when green flag clicked
  ask [Enter the Length:] and wait
  set [Length v] to [answer]
  ask [Enter the width:] and wait
  set [Width v] to [answer]
  set [Area v] to [Length * Width]
  set [Add v] to [Width + Length]
  set [Perimeter v] to [2 * Add]
  say [join [Area:] [join [Area] [join [Perimeter:] [Perimeter]]] for (2) seconds
  
```

Sprite Sprite1 **x** 0 **y** 0
Show **Size** 100 **Direction** 90

Stage
Backdrops

Code

Costumes

Sounds

Motion

Looks

Sound

Events

Control

Sensing

Operators

Variables

My Blocks

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

Sensing

when green flag 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

Question no : 9



Sprite Sprite1 x 0 y 0
Show circle with dot icon circle with lightning bolt icon
Size 100
Direction 90
Stage
Backdrops

Date: _____

QND10

Pseudocode to determine whether
a number is positive or negative.

As Start

Point "Enter a number"

Input number

If number > 0 then,

Point "number is positive"

Else if number < 0

Point "number is negative"

~~End~~ Else

Point "It is Zero"

Endif

End