

## Algorithm

Step 1  $\Rightarrow$  Start

Step 2  $\Rightarrow$  Read number of student in 'n'

Step 3  $\Rightarrow$  Initialize  $i = 0$

Step 4  $\Rightarrow$  Repeat Steps 5 and 6 till  $i \leq n-1$

Step 5  $\Rightarrow$  Call  $a[i].getdata()$

Step 6  $\Rightarrow$  increment  $i$  by 1.

Step 7  $\Rightarrow$  Initialize  $j = 0$

Step 8  $\Rightarrow$  Repeat Steps 9 and 10 till  $j \leq n-1$

Step 9  $\Rightarrow$  Call  $a[j].display()$

Step 10  $\Rightarrow$  Increment  $j$  by 1.

Step 11  $\Rightarrow$  Declare `const MAX = 100`

Step 12  $\Rightarrow$  Create a class `basicinfo` with data members `name [20]`, `rno` and member functions `getdata()` and `display()`

Step 13  $\Rightarrow$  Create a subclass `physicalfit` that inherits the class `basicinfo`

a) Data member - height, weight

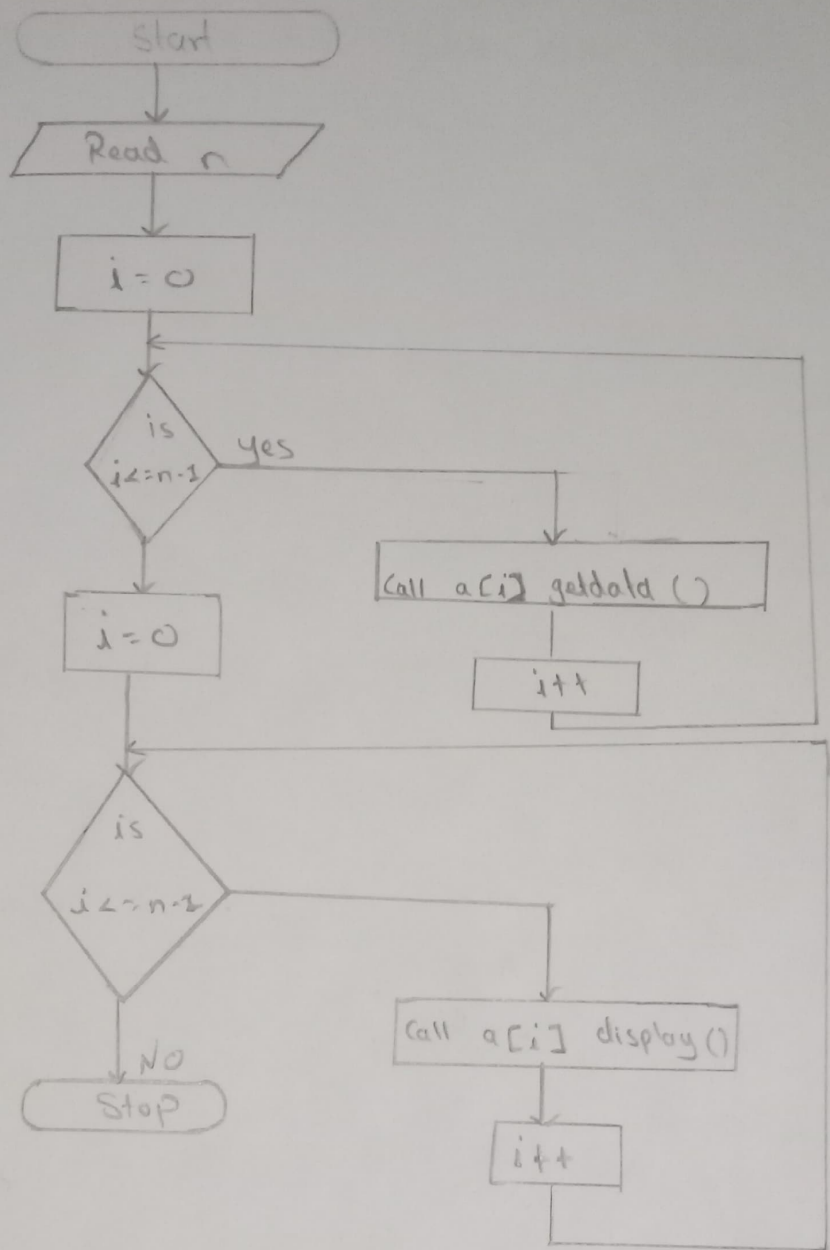
b) member functions - `getdata()`, `display()`

Step 14  $\Rightarrow$  `getdata()` is used to take input for name and rno, height and weight.

Step 15  $\Rightarrow$  `display()` is used for printing the name and rno, height and weight

Step 16  $\Rightarrow$  Stop

# 2) Flowchart



# 1 Algorithm no-2

Step 1:- Start

Step 2:- Declare class biggest with data member int a, b, c, large and member function getdata()

Step 3:- call getdata() to read a, b, c.

Step 4:- Declare friend function big()

Step 5:- call big()

Step 6:- print largest number

Step 7:- Stop



### Algorithm: 3

- Step 1:- Start
- Step 2:- main method Start and Declare parameterized in variable float.
- Step 3:- Display Passing function and two number message
- Step 4:- Read a and b
- Step 5:- Display Screen addition subtraction, and Read ch
- Step 6:- if- Statement and Condition ( $ch = a$ ) operation perform.
- Step 7:- else part executed
- Step 8:- message's Show by one get one
- Step 9:- using argument x, y
- Step 10:- ans = x+y; and return (Ans)
- Step 11:- Stop

## Algorithm:- 4

- Step 1 :- Start
- Step 2 :- Declare function and member variable
- Step 3 :- Display message and read n variable
- Step 4 :- Operation  $temp = sum(n)$
- Step 5 :- function calling in int sum (int value=0;
- Step 6 :- if statement create condition  $(n=0)$  and return (value)
- Step 7 :- else part excute  $value = n + sum(n-1)$   
statement and return value
- Step 8 :- Stop

## Algorithm 5

- Step 1:- Start
- Step 2:- Declare Data member Variable
- Step 3:- Display message Read  $n$
- Step 4:-  $x = \text{fact}(n);$
- Step 5:- Show message and  $x$  value factorial of  $x$
- Step 6:- function Call and argument Pass
- Step 7:- function implement and int value = 1;
- Step 8:- if  $(n = 1)$  Condition
- Step 9:- using formula of factorial value =  $n * \text{fact}(n-1);$
- Step 10:- Stop



## Algorithm: 7

- Step 1:- Start
- Step 2:- declare struct keyword
- Step 3:- Public Declare function's and operator tt void display ();
- Step 4:- function implement fibonacci :: fibonacci()
- Step 5:- by operator function implement show fib.
- Step 6:- Operator function implement
- Step 7:- Start main function and create object fibonacci obj
- Step 8:- using for loop and Statment
- Step 9 :- Stop

## Algorithm:- 8

- Step 1:- Start
- Step 2:- including headerfiles different
- Step 3:- ~~Private~~ ~~float~~ class Declare triangle
- Step 4:- Divide float
- Step 5:- call set-base function where  $b = \text{base}$
- Step 6:- call set-height function where  $h = \text{height}$
- Step 7:- call getarea ();
- Step 8:- call operator = ();
- Step 9:- Print area.
- Step 10:- Stop



## Algorithm 3:-

- Step 1:- Start
- Step 2:- include header file
- Step 3:- main function start
- Step 4:- using pointer variable
- Step 5:- Initialize pointer  
ptr-i, ptr-f, ptr-c, ptr-d.
- Step 6:- Print ptr-i, ptr-f, ptr-c, ptr-d
- Step 7:- delete ptr-i, ptr-f, ptr-c, ptr-d
- Step 8:- Stop

## Algorithm :- 10

- Step 1:- Start
- Step 2:- Class declare student and member variable
- Step 3:- public void getno and void putno ();
- Step 4:- function implement with argument mno=0;
- Step 5:- Display no.
- Step 6:- Create Drive Class and Base class implement
- Step 7:- Create variable float
- Step 8:- void getmarks parameter and putmark function create
- Step 9:- function implement test putmark ()  
Show sub1, sub2
- Step 10:- Create inheritance Derive class base. result and test
- Step 11:- function call implement
- Step 12:- Declare Derive class object
- Step 13:- Create object
- Step 14:- Stop