(week 1)

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Subject - DAA { Design an analysis
of algorithm }

Ans·) Algorithm :

1. Take the input arrays from user (a[j])
2. Take element (x) you want to search in the array from user
3. Set flag variable as -1.
4. Loop: arr[start] → arr[end]
   - if marks found, i.e. arr[current position] == x
     then, print "found" current positive
   - flag = 0
     abort.
5. After loop check flag variable
   - if flag == -1
     then print "not found"
6. STOP

Ans 2. Algorithm

1. Take input-array, left, right and key (x).
2. START LOOP:- while (left greater than or equal to right)
   - mid = left + (right-left)/2
   - if (arr[mid] == x) then
     then return mid
   - else if (arr[mid] less than x) then
     - left = m+1.
   - else
     right = mid -1
3. END LOOP
4. return -1

Ans 3

Algorithm

1. Begin
2. Block size = $\sqrt{size}$
3. Start = 0
4. End = Block size
5. while (arr[end] <= key and end < size) do

        start = end

        end = end + block size

        if (end > size -1) then

            end = size

6. clone
7. for i = start to end -1) do

       if (array [i] == key) then

          return i

8. Done
9. return invalid location
10. END.