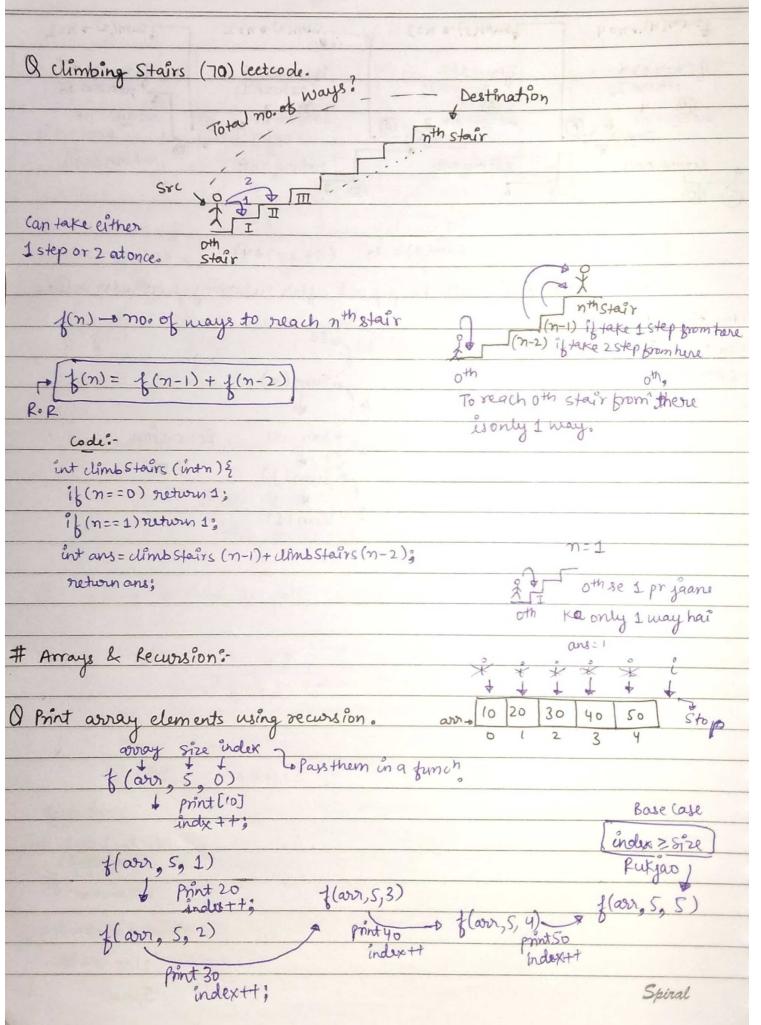
RECURSION - CLASS 2

Date/..../.....



O Search in Array	· · · · · · · · · · · · · · · · · · ·	Code:-	Carry State 6
			tarily, intsize, inttargi
1/p-0 arr-0 10 2	0 30 40 50	Ent	tarrij, intsize, inttargo t index) {
		if (index 2 size) reto	orn false:
target =50	return T/f.	Il Processing	12 about has
		if (avr (index) == target) return true; 11 Recursive Relation	
Lo milne pr - o return Toue		bool ans = search Ans (arr, size, target, index +1);	
- entire array traverse			
hogya - > return false		return ans;	
() () ()			The second second
023	+Search Am (arr, 3,30,2)	searchArr (223,30,2)	Pol Condon of
if (indus > size) x	return false;	return false;	if (index > size)
return false; (0== 30x (arr[Index)==target)	if (index 2 size) a networ jalse; if (arr[Index]== target)	if (avrilladix) = = target)	if (arr[Indus]== target
networn true;	return true;	return true;	return true;
int ans = search Ambary	entans= searchArs (arr,	unt ans = search Ard arr, size, target,	artang= Search Arr(
size target, indust);	size, target, index+1); -robern ans; True	index +1);	endex+1);
Treturn ans;	Treatmans,	networn ans;	return ans;
t main - search Ara (arr, 3, 30,0)	arr , 10/20/30	
LASE TO A THE TAXABLE PARTY OF THE PARTY OF	Mishilare	* **	
Section 1	The state of the s	farget -> [30]	1970
Of find minimum no. ir	an array.		
	arr[], int size, int inde	x, int & mini) {	* * *
11 Base case	The second		
if (index z size) x	return;	KEEP IN MIND	00-
1/Processing.	dent of the control	Tumbe agar Kisi vari	able Data Structure
min = min (min	ni, arr[index]);	Location Ke andra	
11 Recursive Call		hai or turn uska Kis	
minfincles (avor, 2	size, index +1, mini);	Kan rahe ho or us fune	
}		ata store Ema hai. So,	
	tumne us vari	Toble / Data Structure / Cocati	on to Bulleference
	pars kiya hai.	Otherwise unti copy	ban was or
	answer nhis	tore hoga usme.	000
TO STATE OF THE			Spiral

a Store even numbers of an arroy in ve	ctor.	on december
und about the first of the state of the	day at vector cint >	fans) {
void store Even (int april), int size, int in	oux, san vecto.	
11 Base Case		
if (index 2 size) return;	all newser of	-1-2/62 13
11 Processing		
if (arr [inde x] % 2 = = 0) {	the families and	g sellentelling
ans. push-back (avoil index 3);	no and year	
3		
11 Recursive Relation		Dayner word Has
	(40 + A	
store Even (arr, size, index+1, ans);		A service disc
main store Even (arr, 3, 1, 10)	storetven(orr, 3, 2, 10/10)	store Even (arr, 3, 3,
if (melex > size) if (melex > size)	Illindox 2 Can)	il (index 2 size) pretions;
neturn; return;	iffindex 2 size)	6 network;
(0',2==0→T	€301.2=20-DT	10 1990 48
?[(avor[index]% 2==0) if(avor[index]%2	if (art index) %2=2	Ef(arr[index]%2
ans. pushback (arrivals): ==0)	o)	ansepub-back(
ans. push back (ans.pushback(avr(index?);	arr [index]);
storeEven (arr, size Industly	storeEven (avr. stre,	3 ondext, size, ans);
in so	market 1, was 13	, , ,
		in la bi
main - store Even (arr, 3, 0,)	10 21 30	The Marile
array size Index vector cint = ans	0 1 2	an original statement
O You have an array in Enput. Double the value	us using recursion.	100000000000000000000000000000000000000
ilp -> 10 20 30 40 50 -> 0		00/100
void solve (int anos), int size, int index	()	white and the second
11 Base Case	r, to be the	
if (index = size) return;		
1/Processing		
arr[index] = 2 * arr[index];	-347/-	
11 Perunative Call	Ed-170	
solve (avor, stre, index +1);		Spiral
2		

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```
O Traverse the array using recursion and find maximum No.
    void find max (int aver, int size, int index, int & maxi) {
         Al Base Caso
         if ( index > size) return:
        11 Processing
        maxi = max (moxi, arr[index]);
        11 Recursive Relation
       find Max (arr, size, index + 1, maxi);
   int main () }
      arr[]= {10,20,30,40}; intsize=4; int index=0;
      int maxi = INT_MIN:
     find Max (arr, size, index, maxi);
O find target in given array and return its Index if its present and
    return -1 if it's not present.
 int find Target (intarr [], int size, int index, int target) {
     Il Base Case
     if (index = size) return -1;
    11 Processing
  if (arrifindex) == target) return index;
    11 Recursive Relation
  find Target (avr., size, index+1, target);
Of first index of all occurrence of target in Array.
  void printAUOccurrence (int arr [7, int size, int index, int target) {
    if ( index 2 size) return;
                                11 Base Case
    if (arr[index] == target) cout << index << "; // Processing
    printAUOcuvrence (arx, size, index+1, target); // R.R.
```

You have an integer in input and you have to print its digits. Ex: num = 4215 digit =(5) 421 digit=(1) 1) print %10 light = 2 flow 2 print sol, kiya 10 se digit=4 I'm to update Kiya "/"by lo Karke Baselase Krte tim print the digit Code: -Void print Digit (int num) { if (num ==0) return; // Base Case int digit = num % 10; // Processing num = num/10; // Updating num Il Recursive Relation print Digit (num); // Recursive Re cout << digit << " > endl; // Processing 3

9 You have integer input. Store its digits into a vector.
void store Digits (int num, vector < int > & ans) {
11 Base Case
if (nym == 0) return:
11 Processing
int digit = num % 10:
11 Update num
num = num / 10:
11 Recursive Relation
store Digits (num, ans);
11 Processing
ans. push_back (digit);
}
O You have a vector in input. You have to netwon an integer using value of vector as digits for that integer.
1/P-> vector-> 4/2/17 0/P-> (4217)
void createInteger (vector-int > V, int index, int fans) {
1/Base Case
?F (index z size) return;
11 Processing
ans = ans #10 + v[index];
1/Recursive Call
oreate Integer (v, index+1, ans);
}

(9 Y L
O You have a string in input and target characters Bint all
occurrences of the target character into the string. Ex: String s= "Ditti" target = "i" olp -> 1 3
txo string s= Ditty target = "i" olp -> 1 3
Void print Str Target Index (string str, int index, char target) {
if (finaler = at B W ())
if (index z starlength()) return;
11 Processing
if (str[index] == target) cout<< index << 66 99; 11 Recursive Relation
11 Recursive Relation
printStrTorgetIndex (str. index+1 torget):
printStrTorgetIndex (str., index+1, target);
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1/280 . 14 45 61 1