**Binary Search**

For an array of size 𝑛, this method will find the required index withing steps. The array must be sorted.

Find out if 102 is present in the array.

int arr[10] = {1, 2, 3, 4, 10, 102, 109, 210, 290, 325};  
int low = 0, high = (10-1);  
while (high > low)  
{  
 int mid = (low + high)/2;  
 if (arr[mid] > 102) high = (mid – 1);  
 else if (arr[mid] < 102) low = (mid + 1);  
 else  
 {  
 printf("FOUND");  
 break;  
 }  
}

C

Find the last digit of .

Using for loops will cause TLE.

last digit last digit

if (n == 0) last = 1;  
else if (n%4 == 1) last = 8;  
else if (n%4 == 2) last = 4;  
else if (n%4 == 3) last = 2;  
else if (n%4 == 0) last = 6;

C