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Write MALP for the following using procedures

1. Recursive binary search

int bin\_search(int A[], int data, int lo, int hi)

{

int mid;

if (lo > hi) return -1

mid = (lo + high)/2;

if ( data == A[mid]) return mid

if ( data < A[mid]) return bin\_search(A, data, lo, mid-1)

return bin\_search(A, data, mid+1, high)

}

2. Power of a given number using recursion

int power (int a, int n)

{

if (n == 1)

return a;

return a \* power(n - 1);

}

main()

{

pow = power(a, n);

}

3. Sum of N natural numbers using recursion

int RSum(int n)

{

if (n == 1)

return n;

return n + RSum(n - 1);

}

main()

{

sum = RSum(n);

}