**Assignment 8**

**Write a function to implement Binary Search**

binary\_search<-function(vec,n)

{

low=1

high=length(vec)

while(low<=high)

{

mid=ceiling((low+high)%/%2)

if (vec[mid] == n)

{

return(mid)

}

else if (vec[mid] > n)

{

high=mid-1

}

else

{

low=mid+1

}

}

return(-1)

}

print("Enter elements of vector")

x=scan()

n=as.integer(readline("Enter element to search : "))

x=sort(x)

print('Sorted array: ');print(x)

i=binary\_search(x,n)

if(i==-1)

{

print("Element not found")

}else

{

print(paste("Element found at position:",i))

}

**Output**

