 **Bangladesh Open University**

**School of Science and Technology**

**Bsc in Computer Science and Engineering**

**Lab report no. : lab-02.**

**Report on : Stack**

**Course title : Data Structure Lab**

**Course code : CSE21P6**

**Submitted By :**

**Student’s name :MD Rafsan Jani.**

**Student’s ID : 18-0-52-020-023.**

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**Submitted To :**

**Mr Md. Mahbub Hasan**

**Assistant Professor,**

**Department of Computer Science and Engineering**

**DUET**

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**Study Center : Dhaka University of Engineering and Technology, Gazipur**

Implement linear search.

**print ("-----Lnear Search-----")**

**def leaner\_search(data):**

**list = []**

**for x in data:**

**list.append(x)**

**print ("[##] data is recorded .. Now Search Data in Record")**

**def run():**

**print("-"\*10)**

**search\_data = raw\_input("[+]Input for Search data in record==>")**

**for x in list:**

**if search\_data in x:**

**print ("[+] Your input ({}) data is found in ({}) this Record ".format(search\_data,x))**

**else:**

**print("[!!!] Your input ({}) data Is NOT found in ({}) this recoderd ".format(search\_data,x))**

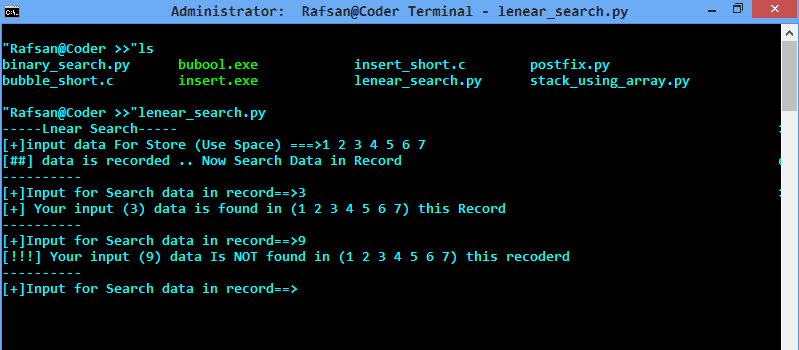
**while 1: run()**

**if \_\_name\_\_ == "\_\_main\_\_":**

**data = raw\_input("[+]input data For Store (Use Space) ===>").split(',')**

**leaner\_search(data)**

OUT PUT



implement binary search.

**print ("-------Binary Search -------")**

**def binary\_search(data):**

**global inp\_data**

**global list**

**list = []**

**for x in data:**

**list.append(x)**

**print ("-"\*10)**

**print ("[+]Record Data in list")**

**print ("-"\*10)**

**inp\_data = raw\_input("[+] Now Search data ===>")**

**last = 0**

**high = len(list)-1**

**mid = 0**

**while last<=high:**

**mid = (high+last)//2**

**if list[mid] <inp\_data:**

**last = mid+1**

**elif list[mid]>inp\_data:**

**high=mid-1**

**else:**

**return mid**

**return -1**

**if \_\_name\_\_ == "\_\_main\_\_":**

**global inp\_data**

**global list**

**data = raw\_input("[+] Insert Data (Use Space) ===>").split(' ')**

**result = binary\_search(data)**

**if result != -1:**

**print ("#"\*10)**

**print ("[+] Yes Your input data ({}) is found in ({}) ".format(inp\_data,list))**

**else:**

**print ("!"\*10)**

**print ("[-] No Your data ({}) is not found in ({}) ".format(input\_data,list))**

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