Daily Work Practice:- Date – 17/8/2023

Program:- Perfect square

```java
package com.ishwarchavan;

import java.util.Scanner;

public class PerfectSquare {

	public static void main(String[] args) {		// main program created

		Scanner sc = new Scanner(System.in);			//creating scanner object
		System.out.println("Enter a number: ");		//taking input from user

		int number = sc.nextInt();

		double root = Math.sqrt(number);			//Getting square root of number
		if(root == (int)root) {				//if true then excute below statement
			System.out.println(number + " is a Perfect Square.");
		}else {								//otherwise it
			System.out.println(number + " is Not a Perfect Square.");
		}
	}
}
```

Program:- Delete The Element From Linked List At Given Position

```java
package com.ishwarchavan;


import java.lang.*;

class LinkedList {			// LinkedList class created
 Node head;
 int size = 0;

 class Node{				// Node Class created
     int data;
     Node next;

     Node(int x)				// parameterized constructor
     {
         data = x;
         next = null;
     }
 }
 public void insert(int data)			// insert function created with parameter
 {
     Node new_node = new Node(data);

     new_node.data = data;
     new_node.next = head;
     head = new_node;
     size++;
 }
 public void deletePosition(int pos) {	// delete position functon is created
     Node temp = head;
     Node prevNode = null;

     if(pos < 1 || pos > size){			// if true then excuted below statement
         System.out.println("Invalid\n");
         return;
     }
```

```
    if(pos == 1){                          // delete the 1st node
        head = head.next;
        System.out.println("Deleted: " + temp.data);
        size--;
        return;                     //return the value
    }


    while (--pos > 0)               // traverse to the pos'th node
    {
        prevNode = temp;
        temp = temp.next;
    }

    prevNode.next = temp.next;

    System.out.println("Deleted: " + temp.data);           //deleting the node
    size--;
}

public void display()                     //DISPALAY Function created
{
    System.out.print("Linked List : ");

    Node node = head;

    while(node!=null){                                // as linked list will end when
Node is Null
        System.out.print(node.data + " ");
        node = node.next;
    }
    System.out.println();
}


public static void main(String args[])                //main program started
{
    LinkedList linked_list = new LinkedList();       //linked list created

    linked_list.insert(5);
    linked_list.insert(4);
    linked_list.insert(3);
    linked_list.insert(2);
    linked_list.insert(1);

    linked_list.display();         //calling function


    linked_list.deletePosition(2);       // deletes the 2nd node
    linked_list.display();         //calling function


    linked_list.deletePosition(3);       // deletes the 3rd node
    linked_list.display();                    //calling function
}


}
```