LAB EXAM

Write a program that creates and initializes a & ”N” element integer array. Calculate and display the average of its values.

Solution :

```
package com.exam;

import java.util.Scanner;

public class labexam {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter the number of elements in the array: ");

int n = sc.nextInt();

int[] arr = new int[n];

for (int i = 0; i < n; i++) {

System.out.print("Enter a value for element " + i + ": ");

arr[i] = sc.nextInt();

}

double average = 0;

for (int i = 0; i < n; i++) {

average += arr[i];

}

average /= n;

System.out.println("The average of the array is: " +average);

}

}
```

OutPut :

```
Javadoc  Declaration  Console
<terminated> labexam [Java Application] C:\Users\ADMIN\.p2\pool\plugins\org.eclipse.ju
Enter the number of elements in the array: 3
Enter a value for element 0: 10
Enter a value for element 1: 10
Enter a value for element 2: 10
The average of the array is: 10.0
```

Write a C Program which receives a SIGINT Signal and when received SIGINT print &"received the signal" and sets to the default behavior, so that second time if a SIGINT is received to the program, it will terminate.

Solution :

```
kali@kali: ~
File  Actions  Edit  View  Help
  GNU nano 6.4                                                    sigint.c
#include <stdio.h>
#include <sys/wait.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>

int kill(pid_t pid, int sig);
void main()
{
        int id;
        printf("Enter pid of the process you want to receive signal from \n");
        scanf("%d", &id);
        kill(id, SIGINT);
        printf("Received the signal");
}
```

```
┌──(kali㉿kali)-[~]
└─$ nano sigint.c

┌──(kali㉿kali)-[~]
└─$ gcc sigint.c -o  sigint

┌──(kali㉿kali)-[~]
└─$ ./sigint
Enter pid of the process you want to receive signal from
7557
Received the signal
```