Date : 1/10/2022

Roll No. and Name : 22BCE538 Shah Kaivan

Course Code and Name : 2CS302 Object Oriented Programming

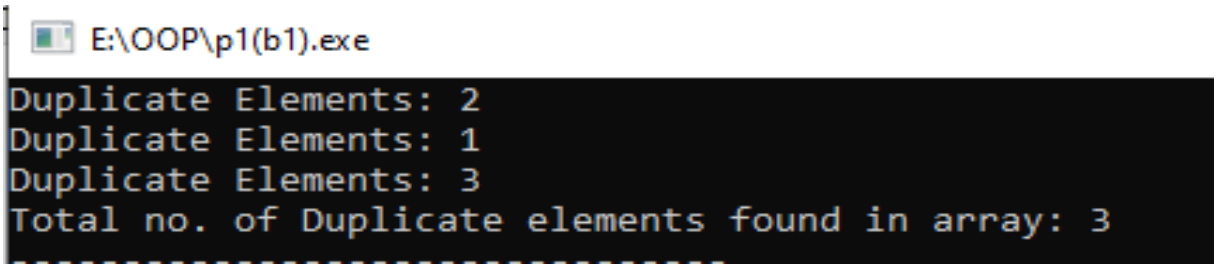
Practical No.: 1 (b).i

AIM: Write a program in C to display and count a total number of duplicate elements in an array.

Methodology followed:
Input:

```
#include<stdio.h>
#include<conio.h>

int main()
{
	int c=0,i,j;
	int a[6]={2,1,2,3,3,1};
	for(i=0;i<6;i++)
	{
		for(j=i+1;j<=6;j++)
		{
			if(a[j]==a[i])
			{
				c++;
				printf("DuplicateElements: %d\n",a[i]);
			}
		}
	}
	printf("Total no. of Duplicate elements found in array: %d",c);
	return 0;
}
```

Output:



Conclusion :

I learnt that how can I count duplicate element in array using for loop and printing of these elements.

Practical No.: 1 (b).ii

AIM: Write a program in C to count the frequency of each element of an array.

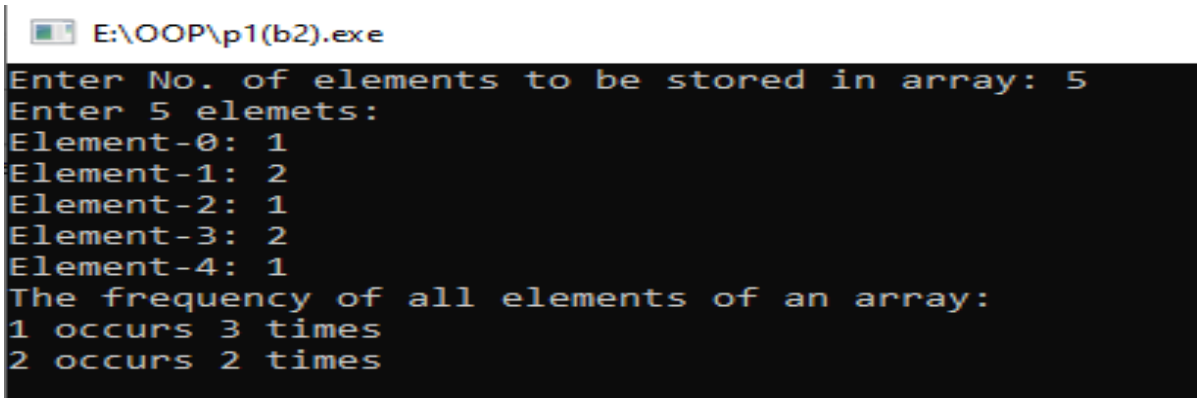
Methodology followed:

Input:

```
#include<stdio.h>
#include<conio.h>

 int main()
{
        int i,j,k=0,n;
        int a[n],a1[n],a2[n];

        printf("Enter No. of elements to be stored in array: ");
        scanf("%d",&n);

        printf("Enter %d elemets: \n",n);
        for(i=0;i<n;i++)
        {
                printf("Element-%d: ",i);
                scanf("%d",&a[i]);
        }
        for(i=0;i<n;i++)
        {
                if(a[i]==0) continue;
                int c=1;
                for(j=i+1;j<n;j++)
                {
```

```
                if(a[j]==a[i])
                {
                        c++;
                        a[j]=0;
                }
        }
        a1[k]=a[i];
        a2[k]=c;
        k++;
    }
    printf("The frequency of all elements of an array: \n");
    for(i=0;i<k;i++)
    {
        printf("%d occurs %d times\n",a1[i],a2[i]);
    }
    printf("\n");
    return 0;
}
```

Output:



Conclusion :

I am able to find frequency of all elements in array using nested loops and how to store these details.

Practical No.: 1 (c)

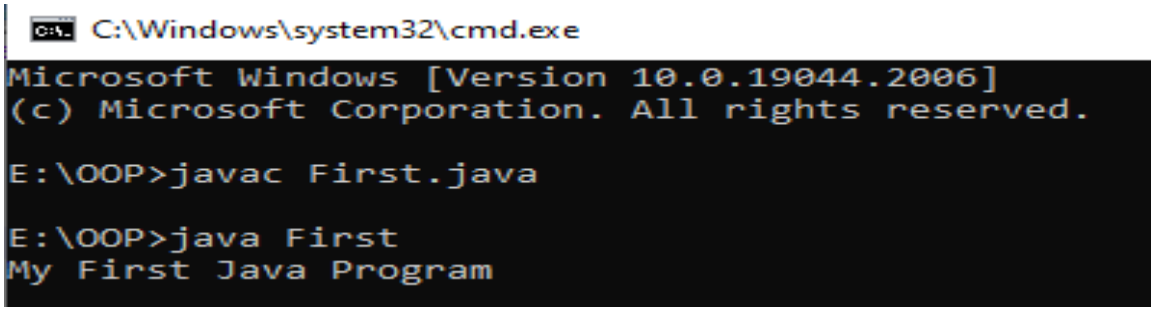
AIM: Write a Java program to display greeting message like: First Java Program….” on console.

Methodology followed:

Input:

```
class First
{
	public static void main(String args[])
	{
		System.out.println("My First Java Program");
	}
}
```

Output:



Conclusion :

I wrote my first code in java and get brief introduction and learnt about printing strings in java. I learnt terminal command to compile and run the code in java.

Practical No.: 1 (d)

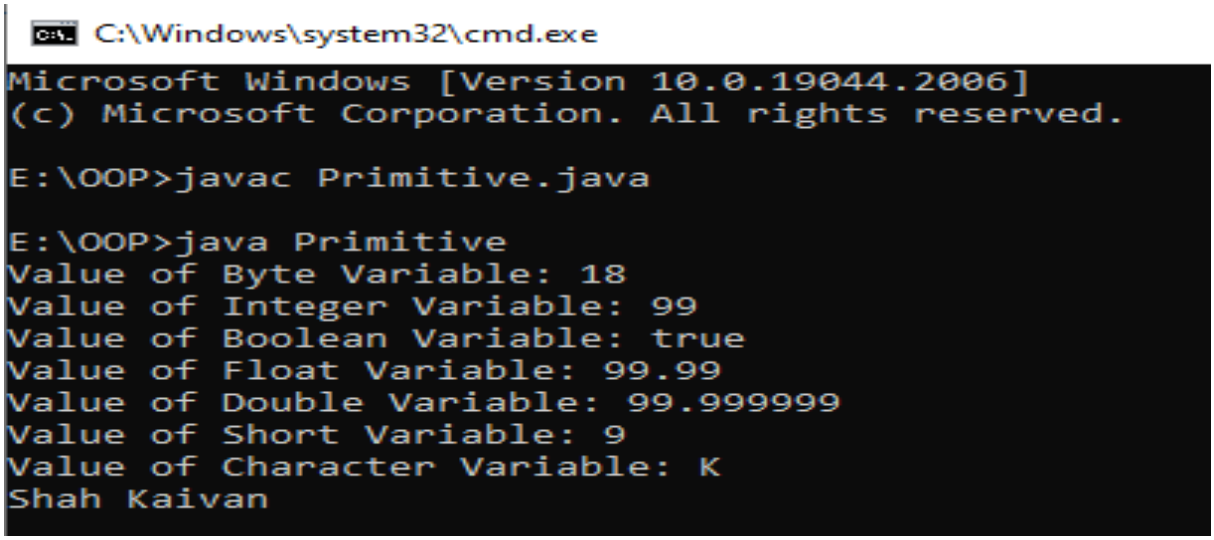
AIM: Write a Java program to display all primitive type variables. Also display your name in the last line.

Methodology followed:

Input:

```
class Primitive
{
	public static void main(String args[])
	{
		byte b=18;
		int i=99;
		boolean bool=true;
		float f=99.99f;
		double d=99.999999d;
		short s=9;
		char c='K';
		String str="Shah Kaivan";

		System.out.println("Value of Byte Variable: "+b);
		System.out.println("Value of Integer Variable: "+i);
		System.out.println("Value of Boolean Variable: "+bool);
		System.out.println("Value of Float Variable: "+f);
		System.out.println("Value of Double Variable: "+d);
		System.out.println("Value of Short Variable: "+s);
		System.out.println("Value of Character Variable: "+c);
		System.out.println(str);
	}
}
```

Output:



Conclusion :

I learnt about primitive data types in java and how to use that. I also got knowledge about every data-type's size and its importance.