LAB programe-3

```
class LAB2q3{
public static void main(String args[]){

		int A[][]=new int[4][];
		A[0]=new int[1];
		A[1]=new int[2];
		A[2]=new int[3];
		A[3]=new int[4];
		int i,j,k;
		k=1;
		for(i=0;i<4;i++)
		{
			for(j=0;j<i+1;j++)
			{
				A[i][j]=k;
				k++;
			}
		}
		for(i=0;i<4;i++)
		{
			for(j=0;j<i+1;j++)
			{
				System.out.print(A[i][j]+"");
			}
			System.out.println();
		}
	}
}
```

LAB programe-4

```
class LAB2q4{
public static void main(String args[])
{
        float cie=44,see=92,totalmarks,see1;
        see1=see/2;
        totalmarks=cie+see1;
        System.out.println("The entered marks of the student for CIE is:" + cie);
        System.out.println("The entered marks of the student for SEE is:" + see);
        System.out.println("The marks scored by the student out of 50 for SEE is:" + see1);
        System.out.println ("The Total Marks  obtained by the student is:"+ totalmarks);
        if(totalmarks>=91 && totalmarks<=100)
        {
                System.out.println("The grade obtained by the student is: S");
        }
        else if(totalmarks>=81 && totalmarks<91)
        {
                System.out.println("The grade obtained by the student is: A");
        }
        else if(totalmarks>=71 && totalmarks<81)
```

```
        {
                System.out.println("The grade obtained by the student is: B");
        }
        else if(totalmarks>=61 && totalmarks<71)
        {
                System.out.println("The grade obtained by the student is: C");
        }
        else if(totalmarks>=51 && totalmarks<61)
        {
                System.out.println("The grade obtained by the student is: D");
        }
        else if(totalmarks>=41 && totalmarks<51)
        {
                System.out.println("The grade obtained by the student is: E");
        }
        else if(totalmarks>=0 && totalmarks<40)
        {
                System.out.println("The grade obtained by the student is: F");
        }
}
}
```

```
C:\JAVA>javac LAB2q4.java

C:\JAVA>java LAB2q4
The entered marks of the student for CIE is:44.0
The entered marks of the student for SEE is:92.0
The marks scored by the student out of 50 for SEE is:46.0
The Total Marks  obtained by the student is:90.0
The grade obtained by the student is: A

C:\JAVA>
```

LAB programe-5

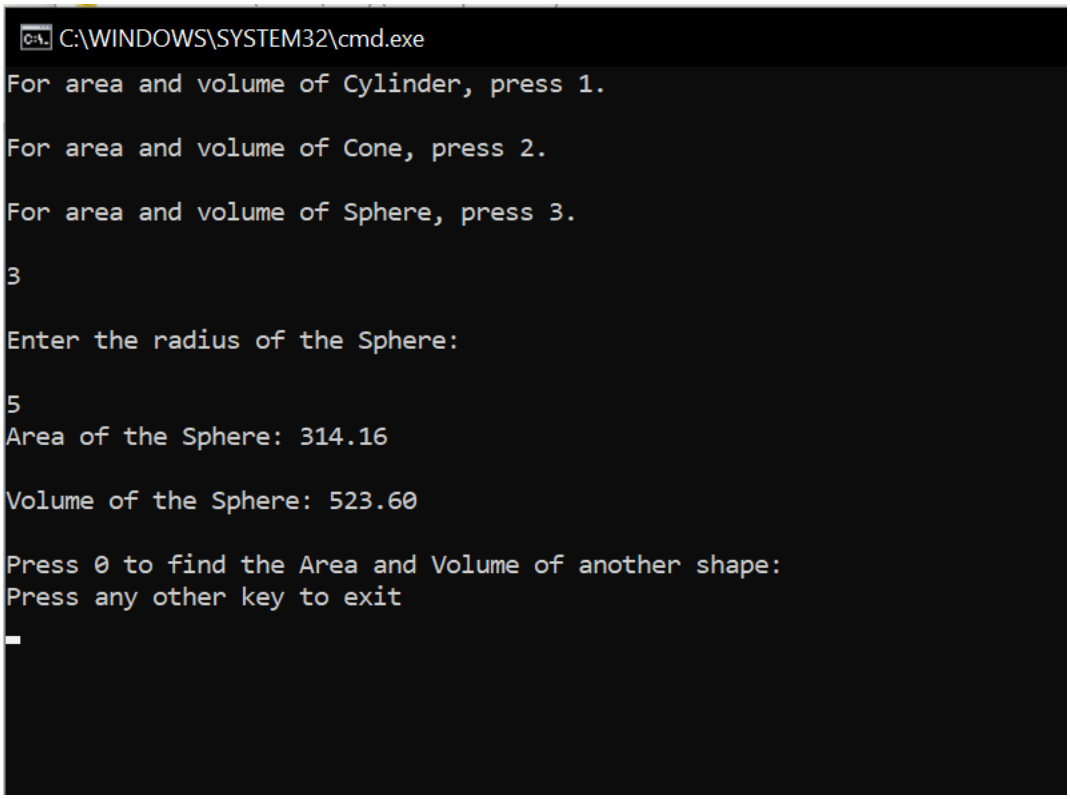
```
class LAB2q5{
	public static void main(String args[]){
		int a=12, b=60,i,j,flag;
		System.out.print("The prime numbers between " + a + " and " + b + " are: ");
		for(i=a;i<=b;i++){
			flag=1;
			for(j=2;j<=i/2;++j){
				if(i%j==0){
					flag=0;
					break;
				}
			}
			if (flag==1){
					System.out.print(" " + i);
				}
		}
	}
}
```

```
C:\>cd C:\JAVA

C:\JAVA>javac LAB2q5.java

C:\JAVA>java LAB2q5
The prime numbers between 6 and 47 are:  7 11 13 17 19 23 29 31 37 41 43 47
C:\JAVA>
```

LAB programe-6

```
#include<stdio.h>
#include<math.h>
int main()
{
	int i,j;
	float rad,hgt,area,vol;
	float pi=3.14;
	while(1)
	{
		printf("For area and volume of Cylinder, press 1.\n\n");
		printf("For area and volume of Cone, press 2.\n\n");
		printf("For area and volume of Sphere, press 3.\n\n");

		scanf("%d",&i);
		printf("\n");
		switch(i)
		{
			case 1:
				printf("Enter the radius of the Cylinder: \n\n");
				scanf("%f",&rad);
				printf("Enter the height of the Cylinder: \n\n");
				scanf("%f",&hgt);
				area=(2*pi*rad*hgt)+(2*pi*rad*rad);
				vol=pi*rad*rad*hgt;
				printf("Area of the Cylinder:%.2f\n\n",area);
				printf("Volume of the Cylinder:%.2f\n\n",vol);
				break;
			case 2:
```

```
                printf("Enter the radius of the Cone: \n\n");
                scanf("%f",&rad);
                printf("Enter the height of the Cone: \n\n");
                scanf("%f",&hgt);
                area=pi*rad*(rad+sqrt((hgt*hgt)+(rad*rad)));
                vol=(pi*rad*rad*hgt)/3;
                printf("Area of the Cone: %.2f\n\n",area);
                printf("Volume of the Cone: %.2f\n\n",vol);
                break;
            case 3:
                printf("Enter the radius of the Sphere: \n\n");
                scanf("%f",&rad);
                area=4*pi*rad*rad;
                vol=(4*pi*rad*rad*rad)/3;
                printf("Area of the Sphere: %.2f\n\n",area);
                printf("Volume of the Sphere: %.2f\n\n",vol);
                break;
            default: printf("Invalid Choice!\n\n");
        }
        printf("Press 0 to find the Area and Volume of another shape:\n");
        printf("Press any other key to exit\n");
        scanf("%d",&j);
        if(j!=0)
        {
            break;
        }
    }
    return 0;
}
```


C:\WINDOWS\SYSTEM32\cmd.exe
For area and volume of Cylinder, press 1.
For area and volume of Cone, press 2.
For area and volume of Sphere, press 3.
3
Enter the radius of the Sphere:
5
Area of the Sphere: 314.16
Volume of the Sphere: 523.60
Press 0 to find the Area and Volume of another shape:
Press any other key to exit