

25/09/2020

EXPERIMENT NO.02 : Q.03

```
class lab2q3 {  
    public static void main (String args[]) {  
        int A [][] = new [4][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++) {  
                System.out.print (A[i][j] + "  " );  
            }  
            System.out.println ();  
        }  
    }  
}
```

OUTPUT :

```
1  
2  3  
4  5  6  
7  8  9  10
```


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EXPERIMENT NO.02: Q-04

```
class lab2q4 {  
    public static void main (String args[]) {  
  
        float cie = 42, see = 88, totalmarks;  
        System.out.println ("CIE MARKS : " + cie);  
        System.out.println ("SEE MARKS : " + see);  
        see = see / 2;  
        totalmarks = cie + see;  
        System.out.println ("TOTAL MARKS : " + totalmarks);  
  
        if (totalmarks >= 91 && totalmarks <= 100)  
        {  
            System.out.println ("Grade : S");  
        }  
        else if (totalmarks >= 81 && totalmarks < 91)  
        {  
            System.out.println ("Grade : A");  
        }  
        else if (totalmarks >= 71 && totalmarks < 81)  
        {  
            System.out.println ("Grade : B");  
        }  
        else if (totalmarks >= 61 && totalmarks < 71)  
        {  
            System.out.println ("Grade : C");  
        }  
        else if (totalmarks >= 51 && totalmarks < 61)  
        {  
            System.out.println ("Grade : D");  
        }  
        else if (totalmarks >= 40 && totalmarks < 51)  
        {  
            System.out.println ("Grade : E");  
        }  
    }  
}
```


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EXPERIMENT NO. 02 : Q. 04

else if (total marks ≥ 0 & total marks < 40)

{

system.out.println("Grade: F");

}

}

}

OUTPUT:

CJE MARKS : 42.0

SEE MARKS : 88.0

TOTAL MARKS : 86.0

Grade : A

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EXPERIMENT No. 02 : Q. 05

```
class kb2q5 {  
    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);  
            }  
        }  
    }  
}
```

OUTPUT :

The Prime Numbers between 12 and 60 are : 13 17 19 23 29 31 37 41 43 47 53 59

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EXPERIMENT NO.02 : Q.06

```
#include <stdio.h>
#include <math.h>
int main()
{
    int i, j;
    float r, h, area, vol;
    float pi = 3.1416;
    while (i)
```

```
    {
        printf("\nEnter the number to choose a shape to view the  
Area and Volume: \n\n");
        printf("[1] CYLINDER \n");
        printf("[2] CONE \n");
        printf("[3] SPHERE \n");
        scanf("%d", &i);
        switch(i)
```

case 1:

```
        printf("\nEnter the radius of the cylinder: ");
        scanf("%f", &r);
        printf("Enter the height of the cylinder: ");
        scanf("%f", &h);
        area = (2 * pi * r * h) + (2 * pi * r * r);
        vol = pi * r * r * h;
        printf("\nArea of the cylinder: %.2f", area);
        printf("\nArea Volume of the cylinder: %.2f", vol);
        break;
```

case 2:

```
        printf("\nEnter radius of the cone: ");
        scanf("%f", &r);
```


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EXPERIMENT NO.02: 8.06

```
printf("Enter the height of the cone: ");  
scanf("%d", &h);  
printf(" ");  
area = pi * r * (r + sqrt((h*h) + (r*r)));  
vol = (pi * r * r * h) / 3;  
printf("Area of the cone: %.2f", area);  
printf("\n Volume of the cone: %.2f", vol);  
break;
```

case 3:

```
printf("\n Enter the radius of the sphere: ");  
scanf("%f", &r);  
area = 4 * pi * r * r;  
vol = (4 * pi * r * r * r) / 3;  
printf("Area of the sphere: %.2f", area);  
printf("\n Volume of the sphere: %.2f", vol);  
break;
```

```
default: printf("INVALID INPUT!!! PLEASE TRY AGAIN!!!\n");
```

```
}  
printf("\n\n Press 0 to find the Area and Volume of another  
shape: ");
```

```
printf(" Press any other number to exit\n");  
scanf("%d", &j);
```

```
if(j != 0)
```

```
{
```

```
break;
```

```
}
```

```
}
```

```
return 0;
```

```
}
```


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EXPERIMENT No. 02 : Q.06

OUTPUT:

Enter the number to choose a shape to view the Area and Volume:

[1] CYLINDER

[2] CONE

[3] SPHERE

1

Enter the radius of the Cylinder : 23.4

Enter the height of the Cylinder : 16.8

Area of the Cylinder : 5910.48

Volume of the Cylinder : 28899.60

Press 0 to find the Area and Volume of another shape:

Press any other number to exit

1
