

## JAVA – Worksheet 3 – Using the Keyboard Class

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The program below show how to declare a Constant and how to use the Keyboard class.

```
class Circle{
    public static void main (String[] args){
        final double PI=3.142;
        System.out.println("Enter radius:");
        double rad=Keyboard.readDouble();
        double area=PI*rad*rad;
        double per=2*PI*rad;
        System.out.println("Area of circle = "+area+" square cm");
        System.out.println("Perimeter of circlce = "+per+" cm");
    }
}
```

**Create the following programs and send them for correction through MS Teams:**

1. Write a program (Average) to ask the user to enter three numbers (double) and output their average.
2. Write a program (Cuboid) to ask the user to enter the length, width and height of a cube and output the volume of the cube.
3. Write a program (Calc) that asks the user to input 2 whole numbers. Then output the Addition, Subtraction, Multiplication and Division of the two numbers.
4. Write a program (Tax) that asks the user to input the price of a product. Program should output the VAT (18%) and total price of the product. Set VAT as constant equal to 0.18.
5. Write a program (Sphere) that outputs the volume of a sphere ( $V=4/3\pi r^3$ ). Ask user to enter radius. Set  $\pi$  as a constant equal to 3.142.

**If you want to work out more exercises, please complete the following:**

6. Write a program (Cylinder) to find out the total surface area of a cylinder ( $\text{Area}=2\pi r^2+2\pi rh$ ). Ask user for the relevant inputs. Set  $\pi$  as a constant equal to 3.142.
7. Write a program (Temp) that converts and outputs the temperature in Celsius to Fahrenheit.  
( $F=C*9/5+32$ )
8. Write a program that works out the simple interest on a loan. Ask the user to enter principal amount of loan, the interest rate and the number of years covered by the loan. Program should then output the simple interest (Simple Interest = (Principal Amount\*Rate\*Years)/100).