**LAB # 1**

**OBJECTIVE**To understand Java Environment and Java Data Types.

**Question:**

**1.**Write a Java program that reads a number in inches, converts it to meters.   
Note: One inch is 0.0254 meter

**Source Code:**

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| --- |
| import java.util.Scanner;  public class Inchtometer {  /\*\*  \* @param args the command line arguments  \*/  public static void main(String[] args) {  // TODO code application logic here  Scanner obj=new Scanner(System.in);    System.out.print("Enter a value for inch: ");  double inch=obj.nextDouble();  double meter=inch\*0.0254;  System.out.println(inch+" inch is "+meter+" meters");  }  } |

**Output:**

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**Question:**

**2.**Write a Java program to convert days into number of months and days.

**Source Code:**

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| import java.util.Scanner;  public class Daystomonth {  public static void main(String[] args) {  // TODO code application logic here    Scanner obj = new Scanner(System.in);  System.out.print("Input Number of Days:");  int day =obj.nextInt();  int limitm=30;  int month= day/limitm;  int remdays= day%limitm;  System.out.println(day+" days are "+month+" months"+ " and "+remdays+" days");  }  } |

**Output:**

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**Question:**

**3.** Write a Java program to compute body mass index (BMI).

**Source Code:**

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| import java.util.Scanner;  public class BMI {  public static void main(String[] args) {  // TODO code application logic here  Scanner obj=new Scanner (System.in);  System.out.print("Enter weight:");  double weight=obj.nextDouble();  double wik = weight\*(0.45359237);  System.out.print("Enter inch:");  double inch=obj.nextDouble();  double hif= inch\*(0.0254);  double bmi=(wik/hif)\*(wik/hif);  System.out.println(bmi);  }  } |

**Output:**

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**LAB EXAMPLES**

**Source Code:**

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| public class Explicit\_Casting\_Example  {  public static void main(String args[])  {  double d = 75.0;  // Explicit casting is needed for below conversion  float f = (float) d;  long l = (long) f;  int i = (int) l;  short s = (short) i;  byte b = (byte) s;    System.out.println("double value : "+d);  System.out.println("float value : "+f);  System.out.println("long value : "+l);  System.out.println("int value : "+i);  System.out.println("short value : "+s);  System.out.println("byte value : "+b);  }  } |

**Output:**

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**Source Code:**

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| --- |
| public class Implicit\_Casting\_Example  {  public static void main(String args[])  {  byte i = 50;  // No casting needed for below conversion  short j = i;  int k = j;  long l = k;  float m = l;  double n = m;    System.out.println("byte value : "+i);  System.out.println("short value : "+j);  System.out.println("int value : "+k);  System.out.println("long value : "+l);  System.out.println("float value : "+m);  System.out.println("double value : "+n);  }  } |

**Output:**

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