

Using if / else if to solve ordering decimals - this is most basic and obvious. Note we did need to utilize else if or we would print multiple lines for test case with all equal values. There were six possible orderings. I wrote sample numbers down first to help me think!

```
public static void main(){
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter double 1: ");
    double d1 = sc.nextDouble();
    System.out.print("Enter double 2: ");
    double d2 = sc.nextDouble();
    System.out.print("Enter double 3: ");
    double d3 = sc.nextDouble();

    if (d1 <= d2 && d2 <= d3) System.out.println(d1 + " " + d2 + " " + d3);
    else if (d1 <= d3 && d3 <= d2) System.out.println(d1 + " " + d3 + " " + d2);
    else if (d2 <= d3 && d3 <= d1) System.out.println(d2 + " " + d3 + " " + d1);
    else if (d2 <= d1 && d1 <= d3) System.out.println(d2 + " " + d1 + " " + d3);
    else if (d3 <= d2 && d2 <= d1) System.out.println(d3 + " " + d2 + " " + d1);
    else if (d3 <= d1 && d1 <= d2) System.out.println(d3 + " " + d1 + " " + d2);
}
```

Using Math class to solve for ordering decimals

```
public static void main(){
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter double 1: ");
    double d1 = sc.nextDouble();
    System.out.print("Enter double 2: ");
    double d2 = sc.nextDouble();
    System.out.print("Enter double 3: ");
    double d3 = sc.nextDouble();

    double min1 = Math.min(d1,d2);
    double left, left2, middle = 0;
    if (min1==d1) left = d2; else left = d1;
    double min = Math.min(min1,d3);
    if (min==min1) left2 = d3; else left2 = min1;
    double max = Math.max(d1,d2);
    max = Math.max(max,d3);
    if (max==left2) middle = left; else middle = left2;
    System.out.println(min+" "+middle+" "+max);
}
```