

## Activity 2-1

### Math API

1. Write a program that prints the following table using Math class.
2. Round the values to keep four-digit after the decimal point. (use either class Math's static methods or System.out.printf(..))

Degree	sin	cos
0	0.0	1.0
10	0.1736	0.9848
...	...	...
350	-0.1736	0.9848
360	0.0	1.0

## Activity 2-2

### Math API

1. Write a method with the following header.  
**public static int reverse(int *number*)**
2. The function of the method is to display the ***number*** in reverse order.
3. In the main(), randomly generate an integer and invoke the method to get the reversed value and display it.

## Activity 2-3

Write a console test program that has a hardcoded array of 4 Strings.  
Code the bubble sort algorithm to sort the array. Display the sorted array.

Example:

```
String a[] = {"aaa", "qqq", "AAA", "QQQ"};

for (...){
    for (...){

        // complete the code fro bubble sort

    }
}
for (int i=0; i<a.length; i++){
    System.out.println(a[i]);
}
```

Output:

AAA  
QQQ  
Aaa  
qqq

### **Activity 2-4**

Write a bubble sort to sort a given array of integers.

Example: {88, -8, -1, 59, 54, 71, 23}

Example: {59, -1, 54, 23, -8, 71, 88, 200}

### **Activity 2-5**

Write a binary search program for sorted array of integers.

Example: {-8, -1, 23, 54, 59, 71, 88}

Example: {-8, -1, 23, 54, 59, 71, 88, 200}