# Java Programming Code Solutions

## Set 1

### Write a for loop that prints the even numbers from 1 to 20.

for (int i = 1; i <= 20; i++) {  
 if (i % 2 == 0) {  
 System.out.println(i);  
 }  
}

### Create a while loop that prompts the user for their flight choice until a valid number is entered.

import java.util.Scanner;  
public class Main {  
 public static void main(String[] args) {  
 Scanner sc = new Scanner(System.in);  
 int choice;  
 while (true) {  
 System.out.println("Enter your flight choice (a valid number):");  
 if (sc.hasNextInt()) {  
 choice = sc.nextInt();  
 break;  
 } else {  
 System.out.println("Invalid input. Try again.");  
 sc.next();  
 }  
 }  
 System.out.println("Valid flight choice entered: " + choice);  
 }  
}

### Write a Java program that uses a for loop to print the first 10 numbers of the Fibonacci sequence.

public class Fibonacci {  
 public static void main(String[] args) {  
 int a = 0, b = 1;  
 System.out.print(a + " " + b);  
 for (int i = 2; i < 10; i++) {  
 int c = a + b;  
 System.out.print(" " + c);  
 a = b;  
 b = c;  
 }  
 }  
}

### Create a Java program using a while loop to calculate the sum of integers from 1 to 100.

public class SumWhile {  
 public static void main(String[] args) {  
 int sum = 0, i = 1;  
 while (i <= 100) {  
 sum += i;  
 i++;  
 }  
 System.out.println("Sum: " + sum);  
 }  
}

### Write a program to calculate the sum of the first 5 natural numbers and print the result (from original list).

public class SumNatural {  
 public static void main(String[] args) {  
 int sum = 0;  
 for (int i = 1; i <= 5; i++) {  
 sum += i;  
 }  
 System.out.println("Sum of first 5 natural numbers: " + sum);  
 }  
}