Lab 03 Tasks:

package Lab\_tasks;  
import java.util.Scanner;  
  
public class Lab\_03\_Questions {  
 public static void main(String[] args) {  
  
 // Question 01: Printing odd and Even Series  
 System.*out*.println("\nQuestion 01: Printing odd and Even Series using for loop");  
 System.*out*.println("Odd\tEven");  
 for(int i=1; i<=20; i++)  
 {  
 if(i%2!=0)  
 System.*out*.print(i);  
 else  
 System.*out*.print("\t"+i+"\n");  
 }  
 System.*out*.println("Using while loop");  
 int i=1;  
 System.*out*.println("Odd\tEven");  
 while(i<=20){  
 if(i%2!=0)  
 System.*out*.print(i);  
 else  
 System.*out*.print("\t"+i+"\n");  
 i++;  
 }  
  
  
 // Question 02 (a): Printing alphabets  
 System.*out*.println("\nQuestion 02 (a): Printing alphabets");  
 for(i=65; i<=90; i++)  
 {  
 System.*out*.print((char)i+" ");  
 }  
  
  
 // Question 02 (b): Printing ASCII values of alphabets  
 System.*out*.println("\n\nQuestion 02 (b): Printing ASCII values of alphabets");  
 for(i=0; i<=255; i++)  
 {  
 System.*out*.print((char)i+" ");  
 }  
  
 // Question 03: Printing table  
 System.*out*.println("\nQuestion 03: Printing table");  
 Scanner sc = new Scanner(System.*in*);  
 System.*out*.print("Enter a number to print its table: ");  
 int num = sc.nextInt();  
 System.*out*.print("Enter starting number to print from: ");  
 int start\_value = sc.nextInt();  
 System.*out*.print("Enter ending number to print table till this number: ");  
 int end\_value = sc.nextInt();  
  
 for(i=start\_value; i<=end\_value; i++)  
 {  
 System.*out*.println(num+"\*"+i+"="+num\*i);  
 }  
  
 // Question 04: Printing diamond  
 // Upper pyramid  
 System.*out*.println("Question 04: Printing Diamond");  
 for(int rows=1; rows<=5; rows++)  
 {  
 for(int space=1; space<=5-rows; space++)  
 {  
 System.*out*.print(" ");  
 }  
 for(int cols=1; cols<=(2\*rows)-1; cols++)  
 {  
 System.*out*.print("\*");  
 }  
 System.*out*.println();  
 }  
 // Lower pyramid (thus combining both to form diamond)  
 for(int rows=4; rows>=1; rows--)  
 {  
 for(int space=1; space<=5-rows; space++)  
 {  
 System.*out*.print(" ");  
 }  
 for(int cols=1; cols<=(2\*rows)-1; cols++)  
 {  
 System.*out*.print("\*");  
 }  
 System.*out*.println();  
 }  
  
 } // end of main() method  
} // end of class

**Output:**

