**********OUTPUT**********

THESE ARE OUTPUTS AS EXPECTED

```
This is original:[1, 0, 1, 0, 1, 0, 1, 0]
This is re-arranged: [0, 1, 0, 1, 0, 1, 0, 1]


** Process exited - Return Code: 0 **
```

```
This is original:[1, 1, 1, 0, 0, 0, 1, 0]
This is re-arranged: [1, 1, 0, 1, 0, 0, 0, 1]


** Process exited - Return Code: 0 **
```

**********CODE**********

```
//***************CODE*******************
import java.util.Scanner;
import java.util.Arrays;

public class Main
{
   public static void main(String[] args) {

   formatUnsignedInteger f;
   int unsignedInteger[] = new int[8];
   Scanner reader=null;

for (int t=0; t<8; t++)
{
   reader = new Scanner(System.in); // Reading from System.in
```

```
   System.out.println("Enter an unsigned integer 1 or 0");
   unsignedInteger[t]=reader.nextInt();
}
reader.close();



System.out.println("\n");
// THE FUNCTION HAS TO START here

f= new formatUnsignedInteger(unsignedInteger);


}
}

class formatUnsignedInteger
{
   String rearranged;
   int temp;

   public formatUnsignedInteger(int[] unsignedInteger)
   {
      int[] original = new int[8];
      original = unsignedInteger;

      System.out.println("This is original:" + Arrays.toString(original));

      for (int bit =0; bit<unsignedInteger.length-1; bit=bit+2)
      {
         temp = unsignedInteger[bit+1];
         unsignedInteger[bit+1]=unsignedInteger[bit];
         unsignedInteger[bit]=temp;
```

```
        }



        rearranged = Arrays.toString(unsignedInteger);
        System.out.println("This is re-arranged: " + rearranged);


    }

}
```