

**NAME : HRITIK SINGH**

**USN : 1BM19CS063**

**DATE : 11 JULY 2022**

**SECTION : B**

**SEM : 6**

**BATCH : 1**

## **PROGRAM : ODD \_EVEN MAP REDUCE**

### **BDA LAB TEST 2 INPUT :-**

### **DRIVER INPUT :-**

```
import
org.apache.hadoop.conf.Configured;

import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapred.FileInputFormat;
import org.apache.hadoop.mapred.FileOutputFormat;
import org.apache.hadoop.mapred.JobClient;
import org.apache.hadoop.mapred.JobConf;
import org.apache.hadoop.util.Tool;
import org.apache.hadoop.util.ToolRunner;

public class OddEvenDriver extends Configured
implements Tool {

    @Override
    public int run(String[] args) throws Exception
    {
        if (args.length < 2)
        {
            System.out.println("Please enter valid
arguments");
        }
    }
}
```



```

@Override

    public void map(LongWritable key, Text value,
OutputCollector<Text,
                                IntWritable> output,
Reporter rep)

    throws IOException
    {

        String data[] = value.toString().split(" ");

        for (String num : data)
        {

            int number = Integer.parseInt(num);

            if (number % 2 == 1)
            {

                output.collect(new Text("ODD"), new
IntWritable(number));
            }

            else
            {

                output.collect(new Text("EVEN"),
                    new IntWritable(number));
            }
        }
    }
}

```

## REDUCER INPUT :-

```

import
java.io.IOException;

import java.util.Iterator;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;

```

```

import org.apache.hadoop.mapred.MapReduceBase;
import org.apache.hadoop.mapred.OutputCollector;
import org.apache.hadoop.mapred.Reducer;
import org.apache.hadoop.mapred.Reporter;

public class OddEvenReducer extends MapReduceBase implements
Reducer<Text,

                                IntWritable, Text,
IntWritable> {

    @Override

    public void reduce(Text key, Iterator<IntWritable> value,
        OutputCollector<Text, IntWritable> output, Reporter rep)

        throws IOException
    {

        int sum = 0, count = 0;
        if (key.equals("ODD"))
        {
            while (value.hasNext())
            {
                IntWritable i = value.next();

                sum += i.get();
                count++;
            }
        }
        else
        {
            while (value.hasNext())
            {
                IntWritable i = value.next();

                sum += i.get();
                count++;
            }
        }
    }
}

```

```
        output.collect(key, new IntWritable(count));  
    }  
}
```