

# Amazon Binning of Ratings

## (Organization Pattern)

This is similar to the partitioning pattern described above but the only difference is that this is a mapper-only job and the bins have to be specified in the mapper setup method. Here I am separating all the products into 5 different bins based on rating(1,2,3,4,5).

## OUTPUT:

```
./hadoop jar /home/sayali/Desktop/AmazonBinning.jar sayali.AmazonReviews7.AmazonBinningOfRating  
/AmazonReviews/AmazonReviews.tsv /AmazonBinning
```

There are 5 Bins for each rating:

Firefox Web browser

Dec 12 12:52

Firefox

Files

Applications

Libraries

System

Settings

Help

Browsing HDFS

inbox (521) - walke.s@h...

localhost:9870/explore.html#/amazonbinning

</

## Product Rating 3 Bin:

Open

ProductRatingBin

Save

US	34428684	R2VNX3YUJH9D	B0037F8XMH	973115561	Conair Oval Shaped Double-Sided Lighted Makeup Mirror, 1x/7x magnification	Beauty	3	0	0	N	N	Not
Very Bright	This would be a good lighted makeup mirror. It was bright enough, it's just okay. I would also prefer if this model was a round mirror instead of oval. Both sides of the mirror are not distorted.	2015-04-01										
US	24903828	RQV91DQUB8D	B006GDA0TE	49858414	Murad Resurgence Renewing Eye Cream, Treat/Repair, 0.5 fl oz (15 ml)	Beauty	3	0	1	N	Y	Bottle not
completely full	This box appears to have been opened but looks fine.	2015-04-01										
US	14187295	R10EPY008W7F8	B00AVVSG7H	850186896	Kevin Murphy Blonde Angel Wash, 8.4 Ounce	Beauty	3	0	0	N	Y	does not lather as much as the
shampoo not for blondes.	Too runny. Need to wait to lather.	2015-04-01										
US	21378072	RWP2D805X0H8	B00AKR0HYM	357098658	Henna Hair & Beard Dye - 100% Natural & Chemical Free - The Henna Guys	Beauty	3	0	0	N	Y	Three
It's not jet black		2015-04-01										
US	32323151	RHTB11Q72BL0X	B00G2TQNZ4	991432840	Anara Organics Vitamin C Serum for Face 20% with Hyaluronic Acid & Vitamin E, 1 fl. oz.	Beauty	3	4	7	N	Y	Three Stars
Y	This Amazon listing of the product does not list all the ...	2015-04-01										
Ingredients	Kind of like you see, receive the product.	2015-04-01										
US	26484145	R543N12918EB	B009W3Q73Q	452696634	Lavanilla The Healthy Deodorant, Vanilla Blackberry, 2 Ounce	Beauty	3	0	0	N	Y	Three Stars
US	51282934	RAGC8G3S03QE	B0037HP90A	803210120	Phillips Norelco Bodygroom Series	Beauty	3	0	0	N	Y	Does an okay job. I prefer very close
Does an okay job.	I prefer very close shaves and this doesn't get me there. Okay for quick touch ups and for trimming. I still have to resort to a regular wet razor for a smooth shave.	2015-04-01										
US	275944	R2CARAPBKX1PQ	B0001AC5Q8	304203872	Cheap Mixed Length 14", 16", 18", 20", 22" Body Wave, 5pcs/lot, 60g/piece, cheap 100% Brazilian Human Hair (Trademarks: Xigaocun Hair)	Beauty	3	3	3	N	Y	First off the hair is beautiful, it really is. Well...let's see...first off the hair is beautiful, it really is. Even after I got it sewed in, I still
loved it BUT it's too thin for my liking.	It's full, but the ends are too thin. It's not the greatest Brazilian hair but it doesn't tangle up or shed much. And another thing, it curls really good, but doesn't	2015-04-01										
shine and contains tiny sparkles.	Not what I was looking for with Gun Metal-eh /:it does not go beautifully - nice and smooth.	2015-04-01										
US	14321149	R2ACU7W620TKY	B0080UQ332	989362919	Lumene Blueberry Curl Mascara Waterproof, 0.24 Fluid Ounce	Beauty	3	33	36	N	Y	NOT an all natural
US	335142	R3C01793AQH95	B0002Q1V86	3741081	Thallion By Jacques Eard Edit Spray/7M39359/3.1 oz/w/oz	Beauty	3	0	0	N	Y	OK but not what I expected.
not the best, I'm sorry but it's not the best.	I was expecting a little more	2015-04-01										
US	3298371	R2M5ASMB0Z0H7	B000U1P0V6	749238378	Hearing Aid Accessory Carrying Pouch	Beauty	3	0	0	N	Y	Nice, but needs improvement
US	45221908	R1F7NBVL25T1	B002M64808	815813490	Clio Designs Palmperfect Electric shaver in Patterns, Color and Pattern may vary	Beauty	3	1	1	N	N	
US	39757543	R1T7QZF505ZUD	B0004F193U	94875928	Mia Secret Mood Nail Lacquer Color Changing Nail Polish Full Size Nail Polish..	Beauty	3	0	0	N	Y	
These three stars	Stars with a extra flash. made a couple others too.	2015-04-01										

BinTest

TabIndex

1 of 1

	Open	Product	Rating	Comments	Save
US	51751080	R117F0GQ03JLHN	B00909739C	34955734 Panasonic ES22113PC Facial Hair Trimmer for Women, with Pivoting Head and Eyebrow Trimmer Attachments, Battery-Operated Beauty	
US	4	0	N	Does the job well. 2015-04-01	
US	36393666	R1VHT458B6FAL	B00863JHCY	Red Cherry #217 False Eyelashes (Pack of 6 Pairs) Beauty 4 0 0 N Y Long lashes The lashes	
US	37634712	ROAZT134DG6G0C	B006G66M01	6 Kleancolor Altera EGO Metallic Eyeliner Duo (MLE408) Pencil Liquid Liner Beauty 4 0 0 0 N Y	
US	Level1	1	0	more than I expected, but this is a personalized taste. But the quality and shipping was great. 2015-04-01	
US	25856650	R19KC103A2H82	B00G5A27L0	Swiss Botany 100% Pure Organic Moroccan Argan Oil for Hair & Face - Cold-pressed Triple Purified Moroccan Argan Oil - Usda	
US	23810899	R2Q1U05H77ZASU	B00CFQCQJ2	mary kaj timewise Repairs Vio-firm lifting serum 1 oz new full size retail \$70.00 Beauty 4 1 1 N N	
US	44124650	R2GTC5BMH4T0C	B00EVZ5Y7V	Frederic Fekkai Apple Cider Clarifying Shampoo Beauty 4 0 0 0 N Y Four Stars Nice squeaky clean	
US	25337408	R2NN8TICL4594M	B00PQ22T1V	Nautica Voyagee Toilette Spray for Men Beauty 4 0 0 N Y Four Stars Smells great and really long	
US	48984546	R1V2E0FHB69J2	B00BCD5C9D	Hyaluronic Acid & Vitamin C Facial Serum by 180 Cosmetics - Concentrated & Pure Hyaluronic Acid for Immediate Results - Most	
US	205071	R2K7SC08U9U	B007XQ130J	Bath and Body Works Pink Chiffon Eau de Toilette 2.5 Ounce Perfume New In Box Beauty 4 1 2 N Y Smells good	
US	50937349	R1MF2B8685Y5C	B00R1Y70LM	Devon Northwest Salon Stout with Back Rest Saddle Hydraulic Spa Stool Beauty 4 0 1 N Y Hot	
US	45314068	R2E3KOR00R9V0	B006PC0808	Lalla All Ionic Soft Bonnet Dryer Beauty 4 1 1 N Y ALMOST 5 STARS This is a serious hair	
US	20646675	R2CON0HJ3A3KL	B0013NB70U	Williams Lectric Shave Beauty 4 0 0 N Y Four Stars works great, more glide and less irritation.	
US	15373830	R1B4F5LMPY073J	B00D0K6E46	Olary Pro Micro-Peel, 1.3 Fl Oz Beauty 4 5 6 N Y Good exfoliation accelerator If you don't do	
US	38947498	R094E03E1C	B007B40416	Texturizing Sea Salt Spray with French Lavender, Sea Kelp & Seaweed Beauty 4 0 0 0 N Y	
US	17866755	R2V4P5MGK0D1B	B00535T005	Gelish Soak Off Gel Nail Polish Beauty 4 0 0 N Y Four Stars Pretty top coat to change any	
US	953356	R2TAK720E08V	B006BE0E9A	Natural Republic Aloe Vera Gel, 100ml, 10.56 Fluid Ounce Beauty 4 0 0 0 N Y The product is good. I	

```

        String rating = token[7].trim();
        if (rating.equals("1")) {
            mos.write("bins", value, NullWritable.get(), "Rating 1");
        }
        if (rating.equals("2")) {
            mos.write("bins", value, NullWritable.get(), "Rating 2");
        }
        if (rating.equals("3")) {
            mos.write("bins", value, NullWritable.get(), "Rating 3");
        }
        if (rating.equals("4")) {
            mos.write("bins", value, NullWritable.get(), "Rating 4");
        }
        if (rating.equals("5")) {
            mos.write("bins", value, NullWritable.get(), "Rating 5");
        }
    }

    protected void cleanup(Context context) throws IOException, InterruptedException {
        mos.close();
    }
}

```

## Driver:

```

public class AmazonBinningOfRating {
    public static void main(String[] args) throws IOException, InterruptedException,
    ClassNotFoundException {
        Configuration conf = new Configuration();
        Job job = Job.getInstance(conf, "Binning Hour");
        job.setJarByClass(AmazonBinningOfRating.class);
        //Setting Mapper Class and the output key and value
        job.setMapperClass(AmazonBinningMapper.class);
        job.setMapOutputKeyClass(Text.class);
        job.setMapOutputValueClass(NullWritable.class);
        //No combiner, partitioner or reducer is used in this pattern!
        job.setNumReduceTasks(0);
        TextInputFormat.addInputPath(job, new Path(args[0]));
        FileOutputFormat.setOutputPath(job, new Path(args[1]));
        MultipleOutputs.addNamedOutput(job, "bins", TextOutputFormat.class, Text.class,
        NullWritable.class);
        MultipleOutputs.setCountersEnabled(job, true);
        System.exit(job.waitForCompletion(true) ? 0 : 1);
    }
}

```