







TEST DOCUMENT

Name	Portfolio Project
Report Name	HR Analytics Dashboard
Developer Name	Md. Touhiduzzaman
Development Tool	Power BI

SL	Name	Query	SQL Result	Power BI Report	Result
1	KPI- Employee Count	SELECT COUNT(DISTINCT EMP_NO) AS TOTAL_EMPLOYEE FROM HRDATA;			Exact Match
2	KPI- Attrition Count	SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes';			Exact Match
3	KPI- Attrition Rate	SELECT ((SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes')/SUM(EMPLOYEE_COUNT)*100)::NUMERI C(10, 2) ' %' FROM HRDATA;			Exact Match

4	KPI- Active Employee	SELECT SUM(EMPLOYEE_COUNT)-(SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes') AS ACTIVE_EMMPLOYEE FROM HRDATA;	<div><div>active_emmployee numeric</div><div>1233</div></div>	<div>Active Employees</div> <div>1233</div>	Exact Match									
5	KPI- Average Age	SELECT ROUND(AVG(AGE)) AS AVERAGE_AGE FROM HRDATA;	<div><div>average_age numeric</div><div>37</div></div>	<div>Average Age</div> <div>37</div>	Exact Match									
6	Attrition by Gender	SELECT GENDER, COUNT(ATTRITION) AS ATTRITION, ((CAST(COUNT(ATTRITION) AS FLOAT)/CAST((SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes') AS FLOAT))*100)::NUMERIC(10, 2) ' %' AS ATTRITION_PCT FROM HRDATA WHERE ATTRITION = 'Yes' GROUP BY GENDER;	<table><tr><th>gender character var</th><th>attrition bigint</th><th>attrition_pct text</th></tr><tr><td>Female</td><td>87</td><td>36.71 %</td></tr><tr><td>Male</td><td>150</td><td>63.29 %</td></tr></table>	gender character var	attrition bigint	attrition_pct text	Female	87	36.71 %	Male	150	63.29 %	<div>Gender Wise Attrition</div> <p>A pie chart titled 'Gender Wise Attrition' showing the distribution of attrition by gender. The chart is divided into two segments: a larger blue segment for Male (150, 63.29%) and a smaller light blue segment for Female (87, 36.71%). A legend on the right indicates Male is blue and Female is light blue.</p>	Exact Match
gender character var	attrition bigint	attrition_pct text												
Female	87	36.71 %												
Male	150	63.29 %												

7	Department wise Attrition	<pre>SELECT DEPARTMENT, COUNT(ATTRITION) AS ATTRITION, ((CAST(COUNT(ATTRITION) AS FLOAT)/CAST((SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes') AS FLOAT))*100)::NUMERIC(10, 2) ' %' AS ATTRITION_PCT FROM HRDATA WHERE ATTRITION = 'Yes' GROUP BY DEPARTMENT;</pre>	<table><tr><th>department</th><th>attrition</th><th>attrition_pct</th></tr><tr><td>character var</td><td>bigint</td><td>text</td></tr><tr><td>HR</td><td>12</td><td>5.06 %</td></tr><tr><td>Sales</td><td>92</td><td>38.82 %</td></tr><tr><td>R&D</td><td>133</td><td>56.12 %</td></tr></table>	department	attrition	attrition_pct	character var	bigint	text	HR	12	5.06 %	Sales	92	38.82 %	R&D	133	56.12 %	<p>Department Wise Attrition</p> <p>Department</p> <ul style="list-style-type: none">R&DSalesHR	Exact Match																					
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8	No of Employee by Age Group	<pre>SELECT AGE_BAND, GENDER, SUM(EMPLOYEE_COUNT) AS TOTAL_EMPLOYEE FROM HRDATA GROUP BY AGE_BAND, GENDER ORDER BY AGE_BAND;</pre>	<table><tr><th>age_band</th><th>gender</th><th>sum</th></tr><tr><td>character var</td><td>character var</td><td>numeric</td></tr><tr><td>25 - 34</td><td>Male</td><td>337</td></tr><tr><td>25 - 34</td><td>Female</td><td>217</td></tr><tr><td>35 - 44</td><td>Female</td><td>196</td></tr><tr><td>35 - 44</td><td>Male</td><td>309</td></tr><tr><td>45 - 54</td><td>Female</td><td>113</td></tr><tr><td>45 - 54</td><td>Male</td><td>132</td></tr><tr><td>Over 55</td><td>Male</td><td>44</td></tr><tr><td>Over 55</td><td>Female</td><td>25</td></tr><tr><td>Under 25</td><td>Female</td><td>37</td></tr><tr><td>Under 25</td><td>Male</td><td>60</td></tr></table>	age_band	gender	sum	character var	character var	numeric	25 - 34	Male	337	25 - 34	Female	217	35 - 44	Female	196	35 - 44	Male	309	45 - 54	Female	113	45 - 54	Male	132	Over 55	Male	44	Over 55	Female	25	Under 25	Female	37	Under 25	Male	60	<p>No of Employee By Age Group</p> <p>Gender</p> <ul style="list-style-type: none">FemaleMale	Exact Match
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9	Education Field wise Attrition	SELECT EDUCATION_FEILD, COUNT(ATTRITION) AS TOTAL_ATTRITION FROM HRDATA WHERE ATTRITION = 'Yes' GROUP BY EDUCATION_FEILD ORDER BY TOTAL_ATTRITION DESC;	<table><thead><tr><th>education_feild character varying (50)</th><th>total_attrition bigint</th></tr></thead><tbody><tr><td>Life Sciences</td><td>89</td></tr><tr><td>Medical</td><td>63</td></tr><tr><td>Marketing</td><td>35</td></tr><tr><td>Technical Degree</td><td>32</td></tr><tr><td>Other</td><td>11</td></tr><tr><td>Human Resourc...</td><td>7</td></tr></tbody></table>	education_feild character varying (50)	total_attrition bigint	Life Sciences	89	Medical	63	Marketing	35	Technical Degree	32	Other	11	Human Resourc...	7	<div>Education Feild wise Attrition</div>	Exact Match																														
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10	Attrition Rate by Gender for different Age group	SELECT AGE_BAND, GENDER, COUNT(ATTRITION) AS TOTAL_ATTRITION, ROUND((CAST(COUNT(ATTRITION) AS NUMERIC)/(SELECT COUNT(ATTRITION) FROM HRDATA WHERE ATTRITION = 'Yes'))*100, 2) ' ' AS ATTRITION_PCT FROM HRDATA WHERE ATTRITION = 'Yes' GROUP BY AGE_BAND, GENDER ORDER BY AGE_BAND, GENDER;	<table><thead><tr><th>age_band character var</th><th>gender character var</th><th>total_attrition bigint</th><th>attrition text</th></tr></thead><tbody><tr><td>25 - 34</td><td>Female</td><td>43</td><td>18.14 %</td></tr><tr><td>25 - 34</td><td>Male</td><td>69</td><td>29.11 %</td></tr><tr><td>35 - 44</td><td>Female</td><td>14</td><td>5.91 %</td></tr><tr><td>35 - 44</td><td>Male</td><td>37</td><td>15.61 %</td></tr><tr><td>45 - 54</td><td>Female</td><td>9</td><td>3.80 %</td></tr><tr><td>45 - 54</td><td>Male</td><td>16</td><td>6.75 %</td></tr><tr><td>Over 55</td><td>Female</td><td>3</td><td>1.27 %</td></tr><tr><td>Over 55</td><td>Male</td><td>8</td><td>3.38 %</td></tr><tr><td>Under 25</td><td>Female</td><td>18</td><td>7.59 %</td></tr><tr><td>Under 25</td><td>Male</td><td>20</td><td>8.44 %</td></tr></tbody></table>	age_band character var	gender character var	total_attrition bigint	attrition text	25 - 34	Female	43	18.14 %	25 - 34	Male	69	29.11 %	35 - 44	Female	14	5.91 %	35 - 44	Male	37	15.61 %	45 - 54	Female	9	3.80 %	45 - 54	Male	16	6.75 %	Over 55	Female	3	1.27 %	Over 55	Male	8	3.38 %	Under 25	Female	18	7.59 %	Under 25	Male	20	8.44 %	<div>25 - 3435 - 44</div> <div>45 - 54Over 55</div> <div>Under 25</div>	Exact Match
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11	Job Satisfaction Rating	<pre>SELECT * FROM CROSSTAB('SELECT JOB_ROLE, JOB_SATISFICTION, SUM(EMPLOYEE_COUNT) FROM HRDATA GROUP BY JOB_ROLE, JOB_SATISFICTION ORDER BY JOB_ROLE, JOB_SATISFICTION') AS CT(JOB_ROLE VARCHAR(50), ONE NUMERIC, TWO NUMERIC, THREE NUMERIC, FOUR NUMERIC) ORDER BY JOB_ROLE;</pre>	<table><tr><th>job_role character varying (50)</th><th>one numeric</th><th>two numeric</th><th>three numeric</th><th>four numeric</th></tr><tr><td>Healthcare Representative</td><td>26</td><td>19</td><td>43</td><td>43</td></tr><tr><td>Human Resources</td><td>10</td><td>16</td><td>13</td><td>13</td></tr><tr><td>Laboratory Technician</td><td>56</td><td>48</td><td>75</td><td>80</td></tr><tr><td>Manager</td><td>21</td><td>21</td><td>27</td><td>33</td></tr><tr><td>Manufacturing Director</td><td>26</td><td>32</td><td>49</td><td>38</td></tr><tr><td>Research Director</td><td>15</td><td>16</td><td>27</td><td>22</td></tr><tr><td>Research Scientist</td><td>54</td><td>53</td><td>90</td><td>95</td></tr><tr><td>Sales Executive</td><td>69</td><td>54</td><td>91</td><td>112</td></tr><tr><td>Sales Representative</td><td>12</td><td>21</td><td>27</td><td>23</td></tr></table>	job_role character varying (50)	one numeric	two numeric	three numeric	four numeric	Healthcare Representative	26	19	43	43	Human Resources	10	16	13	13	Laboratory Technician	56	48	75	80	Manager	21	21	27	33	Manufacturing Director	26	32	49	38	Research Director	15	16	27	22	Research Scientist	54	53	90	95	Sales Executive	69	54	91	112	Sales Representative	12	21	27	23	<table><tr><th colspan="6">Job Satisfaction Rating</th></tr><tr><th>Job Role</th><th>1</th><th>2</th><th>3</th><th>4</th><th>Total</th></tr><tr><td>Sales Executive</td><td>69</td><td>54</td><td>91</td><td>112</td><td>326</td></tr><tr><td>Research Scientist</td><td>54</td><td>53</td><td>90</td><td>95</td><td>292</td></tr><tr><td>Laboratory Technician</td><td>56</td><td>48</td><td>75</td><td>80</td><td>259</td></tr><tr><td>Manufacturing Director</td><td>26</td><td>32</td><td>49</td><td>38</td><td>145</td></tr><tr><td>Healthcare Representative</td><td>26</td><td>19</td><td>43</td><td>43</td><td>131</td></tr><tr><td>Manager</td><td>21</td><td>21</td><td>27</td><td>33</td><td>102</td></tr><tr><td>Sales Representative</td><td>12</td><td>21</td><td>27</td><td>23</td><td>83</td></tr><tr><td>Research Director</td><td>15</td><td>16</td><td>27</td><td>22</td><td>80</td></tr><tr><td>Human Resources</td><td>10</td><td>16</td><td>13</td><td>13</td><td>52</td></tr></table>	Job Satisfaction Rating						Job Role	1	2	3	4	Total	Sales Executive	69	54	91	112	326	Research Scientist	54	53	90	95	292	Laboratory Technician	56	48	75	80	259	Manufacturing Director	26	32	49	38	145	Healthcare Representative	26	19	43	43	131	Manager	21	21	27	33	102	Sales Representative	12	21	27	23	83	Research Director	15	16	27	22	80	Human Resources	10	16	13	13	52	Exact Match
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Test Result:

Total Tests	11
Pass	11
Fail	00
Blocked	00
Not Executed	00