

## Console Output

**Query-01:** Show the complete product inventory with common attributes. (Print the data only for the common attributes which are there for all three product categories)

```
Upworkspace - assignmentCodeStub/pom.xml - Eclipse IDE
File Edit Navigate Search Project Run Design Window Help
Problems Javadoc Declaration Console Debug Coverage
<terminated> Driver [Java Application] C:\Program Files\Java\jdk-11.0.10\bin\javaw.exe (Jan 29, 2023, 2:49:44 PM - 2:49:46 PM) [pid: 16492]

----- Displaying All Products -----
MongoDocId: 63d6e9f98d0eeb231b9326f0 | ProductId: P01EM100 | Category: Mobiles | Manufacturer: Apple | Title: iPhone SE (2020)
MongoDocId: 63d6e9f98d0eeb231b9326f1 | ProductId: P01EM101 | Category: Mobiles | Manufacturer: Apple | Title: iPhone XS Max
MongoDocId: 63d6e9f98d0eeb231b9326f2 | ProductId: P01EM102 | Category: Mobiles | Manufacturer: Google | Title: Google Pixel 4 XL
MongoDocId: 63d6e9f98d0eeb231b9326f3 | ProductId: P01EM103 | Category: Mobiles | Manufacturer: Nokia | Title: Nokia 8.1 (Nokia X7)
MongoDocId: 63d6e9f98d0eeb231b9326f4 | ProductId: P01EM104 | Category: Mobiles | Manufacturer: Samsung | Title: Samsung Galaxy S10+
MongoDocId: 63d6e9f98d0eeb231b9326f5 | ProductId: P01EC111 | Category: Cameras | Manufacturer: Canon | Title: Canon PowerShot SX430
MongoDocId: 63d6e9f98d0eeb231b9326f6 | ProductId: P01EC112 | Category: Cameras | Manufacturer: Nikon | Title: Nikon D5600
MongoDocId: 63d6e9f98d0eeb231b9326f7 | ProductId: P01EC113 | Category: Cameras | Manufacturer: Panasonic | Title: Panasonic LUMIX G7
MongoDocId: 63d6e9f98d0eeb231b9326f8 | ProductId: P01EC114 | Category: Cameras | Manufacturer: Canon | Title: Canon EOS 1500D
MongoDocId: 63d6e9f98d0eeb231b9326f9 | ProductId: P01EC115 | Category: Cameras | Manufacturer: Sony | Title: Sony Alpha ILCE 6100L
MongoDocId: 63d6e9f98d0eeb231b9326fa | ProductId: P01EH701 | Category: Headphones | Manufacturer: Sony | Title: Sony WH-XB900N
MongoDocId: 63d6e9f98d0eeb231b9326fb | ProductId: P01EH702 | Category: Headphones | Manufacturer: Sennheiser | Title: Sennheiser HD 280 PRO
MongoDocId: 63d6e9f98d0eeb231b9326fc | ProductId: P01EH703 | Category: Headphones | Manufacturer: JBL | Title: JBL T460BT Extra Bass
MongoDocId: 63d6e9f98d0eeb231b9326fd | ProductId: P01EH704 | Category: Headphones | Manufacturer: Skullcandy | Title: Skullcandy Crusher Evo
MongoDocId: 63d6e9f98d0eeb231b9326fe | ProductId: P01EH705 | Category: Headphones | Manufacturer: boAt | Title: boAt Rockerz 400
```

**Query-02:** Get the information about the first five products under the category 'Mobile'.

```
Upworkspace - assignmentCodeStub/src/main/java/upgrad/Driver.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console Debug Coverage
<terminated> Driver [Java Application] C:\Program Files\Java\jdk-11.0.10\bin\javaw.exe (Jan 29, 2023, 3:30:41 PM - 3:30:44 PM) [pid: 26020]

----- Displaying Top 5 Mobiles -----
{"_id": {"$oid": "63d6f39304331d1458403fe2"}, "Category": "Mobiles", "ProductId": "P01EM100", "Title": "iPhone SE (2020)", "Manufacturer": "Apple", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": "138.4 x 67.3 x 7.3 mm (5.45 x 2.65 x 0.29 in)", "Weight": "148 g (5.22 oz)", "Display": "4.7 inches, 60.9 cm (~65.4% screen-to-body ratio)", "Bluetooth": "5.0, A2DP, LE", "Sensors": "Fingerprint (front-mounted), accelerometer, proximity, gyro, compass, barometer", "OS": "iOS 13", "Chipset": "Apple A13 Bionic (7 nm)", "CPU": "Hexa-core (2x2.65 GHz Lightning + 4x1.8 GHz Thunder)", "GPU": "Apple GPU (4-core graphics)", "Memory": "64GB 3GB RAM, 128GB 3GB RAM, 256GB 3GB RAM", "Camera": "12 MP, f/1.8 (wide), PDAF, OIS", "Battery": "Non-removable Li-Ion 1821 mAh battery (6.96 Wh)"}
{"_id": {"$oid": "63d6f39304331d1458403fe3"}, "Category": "Mobiles", "ProductId": "P01EM101", "Title": "iPhone XS Max", "Manufacturer": "Apple", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": "157.5 x 77.4 x 7.7 mm (6.20 x 3.05 x 0.30 in)", "Weight": "208 g (7.34 oz)", "Display": "6.5 inches, 102.9 cm (~84.4% screen-to-body ratio)", "Bluetooth": "5.0, A2DP, LE", "Sensors": "Face ID, accelerometer, gyro, proximity, compass, barometer", "OS": "iOS 12, upgradable to iOS 12.2", "Chipset": "Apple A12 Bionic (7 nm)", "CPU": "Hexa-core (2x2.5 GHz Vortex + 4x1.6 GHz Tempest)", "GPU": "Apple GPU (4-core graphics)", "Memory": "64/256/512 GB, 4 GB RAM", "Camera": "12 MP, f/1.8, 26mm (wide), 1/2.55", "1.4µm, OIS, PDAF 12 MP, f/2.4, 52mm (telephoto), 1/3.4", "1.0µm, OIS, PDAF, 2x optical zoom", "Battery": "Non-removable Li-Ion 3174 mAh battery"}
{"_id": {"$oid": "63d6f39304331d1458403fe4"}, "Category": "Mobiles", "ProductId": "P01EM102", "Title": "Google Pixel 4 XL", "Manufacturer": "Google", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": "160.4 x 75.1 x 8.2 mm (6.31 x 2.96 x 0.32 in)", "Weight": "193 g (6.81 oz)", "Display": "6.3 inches, 98.0 cm (~81.3% screen-to-body ratio)", "Bluetooth": "5.0, A2DP, LE, aptX HD", "Sensors": "Face ID, accelerometer, gyro, proximity, compass, barometer", "OS": "Android 10", "Chipset": "Qualcomm SM8150 Snapdragon 855 (7 nm)", "CPU": "Octa-core (1x2.84 GHz Kryo 485 & 3x2.42 GHz Kryo 485 & 4x1.78 GHz Kryo 485)", "GPU": "Adreno 640", "Memory": "64GB 6GB RAM, 128GB 6GB RAM", "Camera": "12.2 MP, f/1.7, 27mm (wide), 1/2.55", "1.4<2><b>5µm, dual pixel PDAF, OIS 16 MP, f/2.4, 58mm (telephoto), 1/3.6", "1.0<c2><b>5µm, PDAF, OIS, 2x optical zoom", "Battery": "Non-removable Li-Po 3700 mAh battery"}
{"_id": {"$oid": "63d6f39304331d1458403fe5"}, "Category": "Mobiles", "ProductId": "P01EM103", "Title": "Nokia 8.1 (Nokia X7)", "Manufacturer": "Nokia", "NetworkTechnology": "GSM / CDMA / HSPA / LTE", "Dimensions": "154.8 x 75.8 x 8 mm (6.09 x 2.98 x 0.31 in)", "Weight": "180 g (6.35 oz)", "Display": "6.18 inches, 95.3 cm (~81.2% screen-to-body ratio)", "Bluetooth": "5.0, A2DP, LE", "Sensors": "Fingerprint (rear-mounted), accelerometer, gyro, proximity, compass", "OS": "Android 9.0 (Pie); Android One", "Chipset": "Qualcomm SDN710 Snapdragon 710 (10 nm)", "CPU": "Octa-core (2x2.2 GHz 360 Gold & 6x1.7 GHz Kryo 360 Silver)", "GPU": "Adreno 616", "Memory": "64 GB, 4 GB RAM - Nokia 8.164/128 GB, 4/6 GB RAM - Nokia X7)", "Camera": "12 MP, f/1.8, 1/2.55", "1.4µm, dual pixel PDAF, OIS 13 MP", "Battery": "Non-removable Li-Ion 3500 mAh battery"}
{"_id": {"$oid": "63d6f39304331d1458403fe6"}, "Category": "Mobiles", "ProductId": "P01EM104", "Title": "Samsung Galaxy S10+", "Manufacturer": "Samsung", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": "157.6 x 74.1 x 7.8 mm (6.20 x 2.92 x 0.31 in)", "Weight": "175 g / 198 g (ceramic) (6.17 oz)", "Display": "6.4 inches, 103.8 cm (~88.9% screen-to-body ratio)", "Bluetooth": "5.0, A2DP, LE, aptX", "Sensors": "Fingerprint (under display), accelerometer, gyro, proximity, compass, barometer, heart rate, SpO2", "OS": "Android 9.0 (Pie); One UI", "Chipset": "Exynos 9820 (8 nm) - EMEAQualcomm SDN855 Snapdragon 855 (7 nm) - USA/LATAM, China", "CPU": "Octa-core (2x2.73 GHz Mongooose M4 & 2x3.31 GHz Cortex-A75 & 4x1.95 GHz Cortex-A55) - EMEAOcta-core (1x2.84 GHz Kryo 485 & 3x2.41 GHz Kryo 485 & 4x1.78 GHz Kryo 485) - USA/LATAM, China", "GPU": "Mali-G76 MP12 - EMEA Adreno 640 - USA/LATAM, China", "Memory": "1 TB, 12 GB RAM, 128/512 GB, 8 GB RAM", "Camera": "16MP with f2.2 aperture ultra wide + 12MP with f1.5 and f2.4 aperture wide + 12MP f2.4 tele 10MP f1.9 front facing camera", "Battery": "Non-removable Li-Ion 4100 mAh battery"}
```

**Query-03:** Get the products ordered by category without their auto-generated '\_id' column in MongoDB.

```
----- Displaying Products ordered by categories -----
{"Category": "Mobiles", "ProductId": "P01EM100", "Title": "iPhone SE (2020)", "Manufacturer": "Apple", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": {"Category": "Mobiles", "ProductId": "P01EM101", "Title": "iPhone XS Max", "Manufacturer": "Apple", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": {"Category": "Mobiles", "ProductId": "P01EM102", "Title": "Google Pixel 4 XL", "Manufacturer": "Google", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": {"Category": "Mobiles", "ProductId": "P01EM103", "Title": "Nokia 8.1 (Nokia X7)", "Manufacturer": "Nokia", "NetworkTechnology": "GSM / CDMA / HSPA / LTE", "Dimensions": {"Category": "Mobiles", "ProductId": "P01EM104", "Title": "Samsung Galaxy S10+", "Manufacturer": "Samsung", "NetworkTechnology": "GSM / CDMA / HSPA / EVDO / LTE", "Dimensions": {"Category": "Headphones", "ProductId": "P01EH701", "Title": "Sony WH-XB900N", "Manufacturer": "Sony", "HeadPhoneType": "Over Ear", "Battery": "30 Hours", "Warranty": "1 Year", "ConnectorType": "Wired", "WithMicrophone": "Yes", "ItemWeight": "260 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Headphones", "ProductId": "P01EH702", "Title": "Sennheiser HD 280 PRO", "Manufacturer": "Sennheiser", "HeadPhoneType": "Over Ear", "Battery": null, "Warranty": "2 Year", "ConnectorType": "Wired", "WithMicrophone": "No", "ItemWeight": "285 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Headphones", "ProductId": "P01EH703", "Title": "JBL T460BT Extra Bass", "Manufacturer": "JBL", "HeadPhoneType": "On Ear", "Battery": "11 Hours", "Warranty": "1 Year", "ConnectorType": "Wireless", "WithMicrophone": "Yes", "ItemWeight": "160 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Headphones", "ProductId": "P01EH704", "Title": "Skullcandy Crusher Evo", "Manufacturer": "Skullcandy", "HeadPhoneType": "Over Ear", "Battery": "40 Hours", "Warranty": "2 Year", "ConnectorType": "Wireless", "WithMicrophone": "Yes", "ItemWeight": "260 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Headphones", "ProductId": "P01EH705", "Title": "boAt Rockerz 400", "Manufacturer": "boAt", "HeadPhoneType": "On Ear", "Battery": "8 Hours", "Warranty": "1 Year", "ConnectorType": "Wireless", "WithMicrophone": "Yes", "ItemWeight": "160 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Cameras", "ProductId": "P01EC111", "Title": "Canon PowerShot SX430", "Manufacturer": "Canon", "EffectivePixels": "20MP", "Zoom": "45X Optical Zoom", "Dimensions": {"Category": "Cameras", "ProductId": "P01EC112", "Title": "Nikon D5600", "Manufacturer": "Nikon", "EffectivePixels": "24.2 MP", "Zoom": "16.67 x Optical Zoom", "Dimensions": {"Category": "Cameras", "ProductId": "P01EC113", "Title": "Panasonic LUMIX G7", "Manufacturer": "Panasonic", "EffectivePixels": "16.00 MP", "Zoom": "3X Optical Zoom", "Dimensions": {"Category": "Cameras", "ProductId": "P01EC114", "Title": "Canon EOS 1500D", "Manufacturer": "Canon", "EffectivePixels": "24.1 MP", "Zoom": "3X", "Dimension": "7.76 x 1.39 x 0.04", "Weight": "475 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}, {"Category": "Cameras", "ProductId": "P01EC115", "Title": "Sony Alpha ILCE 6100L", "Manufacturer": "Sony", "EffectivePixels": "24.2 MP", "Zoom": "", "Dimension": "12 x 6.4 x 3.6", "Weight": "466 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}
```

**Query-04:** Get the product count for every category.

```
----- Displaying Product Count by categories -----
Category : Cameras | Count : 5
Category : Headphones | Count : 5
Category : Mobiles | Count : 5
```

**Query-05:** Get the information about all the wired headphones.

```
----- Displaying Wired headphones -----
{"_id": {"$oid": "63d6f39304331d1458403fed"}, "Category": "Headphones", "ProductId": "P01EH702", "Title": "Sennheiser HD 280 PRO", "Manufacturer": "Sennheiser", "HeadPhoneType": "Over Ear", "Battery": null, "Warranty": null, "ConnectorType": "Wired", "WithMicrophone": "No", "ItemWeight": "285 g", "Color": "Black", "AdditionalFeatures": "Dynamic, closed-ear headphones with up to 32 dB attenuation of outside sound"}
```