**Assignment1:**

For the given Object solve the following:

var people = [

{

"firstname": "praveen",

"lastname": "gubbala",

"age": 36,

"gender": "male",

"city": "hyd",

"salary": 10000

},

{

"firstname": "srikanth",

"lastname": "gubbala",

"age": 32,

"gender": "male",

"city": "bengaluru",

"salary": 20000

},

{

"firstname": "pradeep",

"lastname": "reddy",

"age": 21,

"gender": "male",

"city": "hyd",

"salary": 25000

},

{

"firstname": "mounika",

"lastname": "mudiraj",

"age": 20,

"gender": "female",

"city": "nalgonda",

"salary": 30000

},

{

"firstname": "nikhil",

"lastname": "m",

"age": 22,

"gender": "male",

"city": "guntur",

"salary": 2000

},

{

"firstname": "riya",

"lastname": "bhadouria",

"age": 14,

"gender": "female",

"city": "indore",

"salary": 40000

}

];

1. Print all the firstnames.

2. Print all the full names.

3. Print only those names whose age is more than 25.

4. Print all female names.

5. Print only those names whose salary is more than 25000 and increase their salaries by 15%.

6. Using prompt, print only those names whose city is "hyd".

7. Print the total salary of all the people.

8. Print all the **female** names.

9. Print all the **firstnames** whose salary is **more** than 25000.

10. Using prompt, print all names whose city is "**hyd**".

11. Print all the **fullnames** in the alphabetical order.

12. Print all the **fullnames** in the increasing order of their age.

13. Print all the **fullnames** in the reverse alphabetical order.

14. Print all the **fullnames** in the decreasing order of their salaries.

15. Print all the **cities** in which the people live. There should not be any **duplicate** cities.

16. Print all the **male** names whose age is greater than **25.**

17. Print all names that starts with "**p**" and the firstname should be in **UPPERCASE**. e.g. PRAVEEN Gubbala

18. Print the average age of all students

8. Sort the array based on their lastname

Advanced:

1. **Print all the full names in ascending order of their salaries.**
2. **Separate all male and female people and store them in separate arrays.**
3. **Store all the cities in an array. There should not be any duplicates.**
4. **Print all the full names with the first letter in uppercase. Example: "Praveen Gubbala".**
5. **Print the full names of all the male people in alphabetical order(a-z).**
6. **Print the full names of all the female people in reverse alphabetical order(z-a).**
7. **Increase the salaries of all people by 15% and print the new array of objects.**
8. **Check whether any person is having the letter 'k' in their first names.**
9. **Check whether all people are having the letter 'a' in their last names.**
10. **Add a "role" property to each object and print the new array of objects. For example, add "role":"Lead Engineer" to each object.**

**Assignment2:**

var products = [

{

"name": "Duracell - AAA Batteries (4-Pack)",

"type": "HardGood",

"price": 5.49,

"category": "Household Batteries",

"manufacturer": "Duracell",

},

{

"name": "Hard Rock TrackPak - Mac",

"type": "Software",

"price": 29.99,

"category": "Recording Equipment",

"manufacturer": "Hal Leonard",

},

{

"name": "Duracell - AA 1.5V CopperTop Batteries (4-Pack)",

"type": "HardGood",

"price": 5.62,

"category": "Household Batteries",

"manufacturer": "Duracell",

},

{

"name": "Energizer - MAX Batteries AA (4-Pack)",

"type": "HardGood",

"price": 5.32,

"category": "Household Batteries",

"manufacturer": "Energizer",

},

{

"name": "METRA - Antenna Cable Adapter - Black",

"type": "HardGood",

"price": 13.99,

"category": "Antennas & Adapters",

"manufacturer": "Metra",

},

{

"name": "WipeDrive Six - Mac|Windows",

"type": "Software",

"price": 23.99,

"category": "Maintenance Software",

"manufacturer": "White Canyon",

}

];

1. Print all the product names.

2. Print all the hardgoods.

3. Print all the softwares.

4. Print all the categories.

5. Print only the products manufactured by Duracell.

6. Print the product names in ascending order of their prices.

7. Print only those products whose price is more than 14.99.

8. Print only those products whose price is less than 9.99.

9. Print the total price of all the hardgoods.

10. Print the average price of the softwares.

1. **Print all the product names in ascending order of their prices.**
2. **Separate all Hardgood and Software and store them in separate arrays.**
3. **Store all the categories in an array. There should not be any duplicates.**
4. **Print all the product names with numbering.**

**Expected output: "1. Duracell - AAA Batteries (4-Pack)"**

**"2. Hard Rock TrackPak - Mac" ……..and so on.**

1. **Print the product names of all the Hardgoods in alphabetical order(a-z).**
2. **Print the product names of all the Softwares in reverse alphabetical order(z-a).**
3. **Decrease the price of all products by 10% and print the new array of objects.**
4. **Check whether any of the manufacturers is "Metra".**
5. **Check whether all products are manufactured by "Duracell".**
6. **Add a "discount" property to each object and print the new array of objects. For example, add "discount": 1.5 to each object.**

**Assignment 3:**

var products = [

{

"id": 1,

"title": "iPhone 9",

"description": "An apple mobile which is nothing like apple",

"price": 549,

"discountPercentage": 12.96,

"rating": 4.69,

"stock": 94,

"brand": "Apple",

"category": "smartphones",

"thumbnail": "products/1/thumbnail.jpg"

},

{

"id": 2,

"title": "iPhone X",

"description": "6.5-inch Super Retina HD display with OLED",

"price": 899,

"discountPercentage": 17.94,

"rating": 4.44,

"stock": 34,

"brand": "Apple",

"category": "smartphones",

"thumbnail": "products/2/thumbnail.jpg"

},

{

"id": 3,

"title": "Samsung Universe 9",

"description": "Samsung's new phone which goes beyond Galaxy",

"price": 1249,

"discountPercentage": 15.46,

"rating": 4.09,

"stock": 36,

"brand": "Samsung",

"category": "smartphones",

"thumbnail": "products/3/thumbnail.jpg"

},

{

"id": 4,

"title": "OPPOF19",

"description": "OPPO F19 is officially announced on April 2021.",

"price": 280,

"discountPercentage": 17.91,

"rating": 4.3,

"stock": 123,

"brand": "OPPO",

"category": "smartphones",

"thumbnail": "products/4/thumbnail.jpg"

},

{

"id": 5,

"title": "Huawei P30",

"description": "Huawei's re-badged P30 Pro New Edition",

"price": 499,

"discountPercentage": 10.58,

"rating": 4.09,

"stock": 32,

"brand": "Huawei",

"category": "smartphones"

}

];

1. **Print all the product titles in ascending order of their prices.**
2. **Separate all the Apple and non-Apple products and store them in separate arrays.**
3. **Store all the brands in an array. There should not be any duplicates.**
4. **Modify all the descriptions so that they have only 20 characters and print the new descriptions.**

**Expected output: "An apple mobile whic"**

**"6.5-inch Super Retin" ……and so on**

1. **Print the product titles having price more than 500 in alphabetical order(a-z).**
2. **Print the product names having stock less than 50 in reverse alphabetical order(z-a).**
3. **Decrease the "discountPercentage" of all products by 3% and print the new array of objects.**
4. **Check whether any of the products has stock less than 10.**
5. **Check whether all products have thumbnails or not.**
6. **Add a "newPrice" property to each object by calculating the price according to the discountPercentage and print the new array of objects.**

**For example:**

**"price": 549,**

**"discountPercentage": 12.96,**

**"newPrice": 71.1504………………………………………(549-12.96% = 71.1504)**