Practical: 2

Que:1 Write a Node.js program to create a console application to check whether a user is eligible to sign-in or not based on age.

```
const { Console } = require('console')
const readline = require('readline')
var rl = readline.createInterface(process.stdin, process.stdout)
rl.question('Enter Your Name : ', name =>
{
    rl.question('Enter Your Age : ', age =>
    {
        rl.question('Enter Your Email Id : ', email =>
        {
            rl.question('Enter Your Mobile No. : ', mobile =>
            {
                if (age < 18)
                {
                    var ag = 18 - age
                    console.log("Minimum required 18 years and your age is "
                    + age + ", You should wait at least " + ag + " year(s)
                    more.")
                }
                else {
                    console.log("Great " + name + " you can sign in.\nUser
                    Name : " + name + "\nAge : "+age+" \nEmail ID : " + email
                    + "\nMobile : " + mobile)
                }
                process.exit()
            })
        })
    })
})
```

Output:

```
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2> node p2.1.js
Enter Your Name : Mr.Bean
Enter Your Age : 67
Enter Your Email Id : beadmr@gmail.com
Enter Your Mobile No. : 2235468795
Great Mr.Bean you can sign in.
User Name : Mr.Bean
Age : 67
Email ID : beadmr@gmail.com
Mobile : 2235468795
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2>
```

Que:2 Write a Node.js program to create an object named book using object literal syntax. Add book_title, author and publish_year as properties to the book object and assign it's appropriate values. Now create function print_info() to print the book object to the console.

```
const book = [
    {
        book_title : "Harry Potter and the Sorcerer's Stone",
        author : "J.K. Rowling",
        publish_year : 1997
    },
    {
        book_title : "book2",
        author : "author2",
        publish_year : 2000
    },
    {
        book_title : "book3",
        author : "author3",
        publish_year : 2003
    }
]
function print_info(book1)
{
    book1.forEach(element =>
    {
        console.log(element)
    });
}
var b = new print_info(book)
```

Output:

```
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2> node p2.2.js
{
  book_title: "Harry Potter and the Sorcerer's Stone",
  author: 'J.K. Rowling',
  publish_year: 1997
}
{ book_title: 'book2', author: 'author2', publish_year: 2000 }
{ book_title: 'book3', author: 'author3', publish_year: 2003 }
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2>
```

Que:3 Create an array named products. Add objects to the array. Each object should be a single product, with 3 properties: name, inventory and unit_price. Create two functions named listProducts() and totalValue(). A listProducts() function accepts a parameter -- the array of products and it should return an array of the names of the products. A function named totalValue() should accept a parameter -- the array of products and it should return the total value of all of the products in the array. To calculate the total value of one product multiply the inventory value with the unit_price.

```
const products = [
    {
        name : "Pen",
        inventory : 10,
        unit_price : 15
    },
    {
        name : "Pencil",
        inventory : 10,
        unit_price : 5
    },
    {
        name : "Scale",
        inventory : 10,
        unit_price : 10
    }
]
function listProducts(pro)
{
    pro.forEach(element =>
    {
        console.log(element.name)
    });
}
console.log("Product list")
var pn = new listProducts(products)
function totalValue(pro)
{
    var total = 0
    pro.forEach(element =>
    {
        total += element.inventory * element.unit_price
    });
    return console.log("Total value : "+total)
}
var tv = new totalValue(products)
```

Output:

```
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2> node p2.3.js
Product list
Pen
Pencil
Scale
Total value : 300
PS E:\B_Tech\SEM_5\SP\Practical\Code\Practical 2>
```