EXERCISE1:
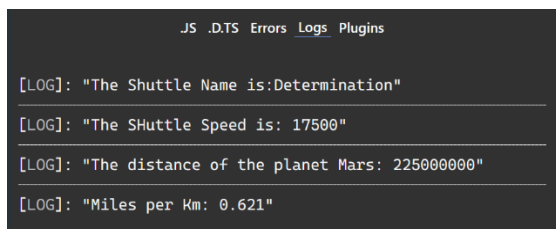
Question1:

```
//var ShuttleName="Determination";
//var ShuttleSpeed=17500;
//var MarsDistance=225000000;
//var MoonDistance=384400;
//var milesperKm=0.621;
let ShuttleName:string="Determination";
let ShuttleSpeed:number=17500;
let MarsDistance:number=225000000;
let MoonDistance:number=384400;
let milesperKm:number=0.621;
console.log("The Shuttle Name is:"+ShuttleName);
console.log("The Shuttle Speed is: "+ShuttleSpeed);
console.log("The distance of the planet Mars: "+MarsDistance);
console.log("Miles per Km: "+milesperKm);
```

```
JS  .D.TS  Errors  Logs  Plugins

[LOG]: "The Shuttle Name is:Determination"

[LOG]: "The SHuttle Speed is: 17500"

[LOG]: "The distance of the planet Mars: 225000000"

[LOG]: "Miles per Km: 0.621"
```
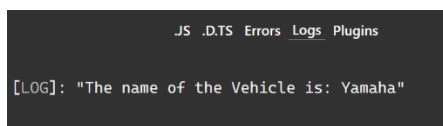
Question2:

```
let VehicleName:string="Yamaha";
console.log("The name of the Vehicle is: "+VehicleName);
```

```
JS  .D.TS  Errors  Logs  Plugins

[LOG]: "The name of the Vehicle is: Yamaha"
```

Question3:

```
let cargoHold:string[]=['oxygen tanks','space suits','parrot','instruction
manual','meal packs','slinky','security blanket'];
for(var value of cargoHold){
console.log(value);
}
```

Question4:

```typescript
let element1:any=['hydrogen','H',1.008];
let element2:any=['helium','He',4.003];
let element26:any=['iron','Fe',55.85];
console.log("The element1 is: "+element1);
console.log("The element2 is: "+element2);
console.log("The element26 is: "+element26);
```

Question5:

```typescript
function myFunction(x:number):number{
return x*2;
}
let value:number=myFunction(5);
console.log("The value of the function is: "+value);
```

Question6:

```typescript
var myFunction=function(x:number):number{
return x*2;
}
console.log("Implementing anonymous functions, and the outcome is: "+myFunction(2));
```

Question7:

```
function myFunction(x:number,y?:number):number{
    if(typeof y=="undefined"){
        return x+5;
    }
    return x+y+5;
}
let val:number=myFunction(1);
let val1:number=myFunction(1,2);
console.log("Passing a single argument: "+val);
console.log("Passing 2 arguments: "+val1);
```

Question8:

```
function isLeap(year:number):boolean{
    if(year%400==0)
    return true;
    if(year%100==0)
    return false;
    if(year%4==0)
    return true;
    return false;
}
console.log("Is 2000 a leap year: "+isLeap(2000));
console.log("Is 1998 a leap year: "+isLeap(1998));
```

Question9:

```
function myFunction(name:string):string{
    var p="";
    for(var i=name.length-1;i>=0;i--){
```

```
        p+=name[i];
    }
    return p;
}
let val:string=myFunction("Madhan");
console.log("The reversed string is: "+val);
```

```
[LOG]: "The reversed string is: nahdaM"
```