

Unit 1

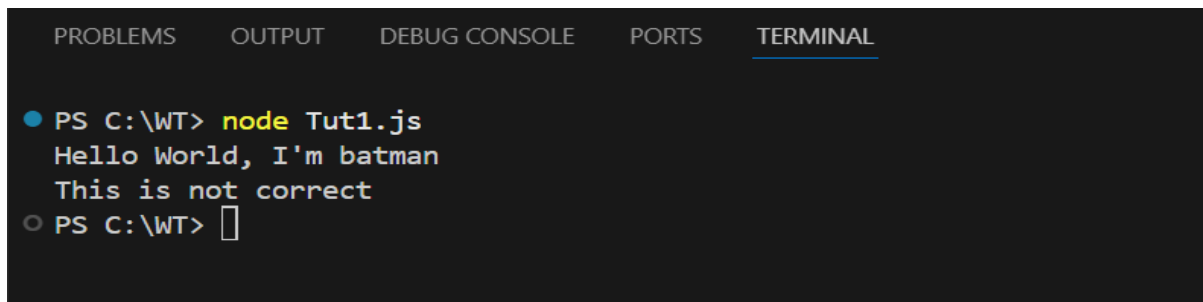
Q.1) Create an application to demonstrate Node.js Modules.

Hello World Program

```
console.log("Hello World, I'm batman");
```

```
console.error("This is not correct");
```

Output :



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL

● PS C:\WT> node Tut1.js
Hello World, I'm batman
This is not correct
○ PS C:\WT> 
```

Functions

```
function myfun(num1,num2)
```

```
{
```

```
    console.log(num1+num2);
```

```
    console.log(num1-num2);
```

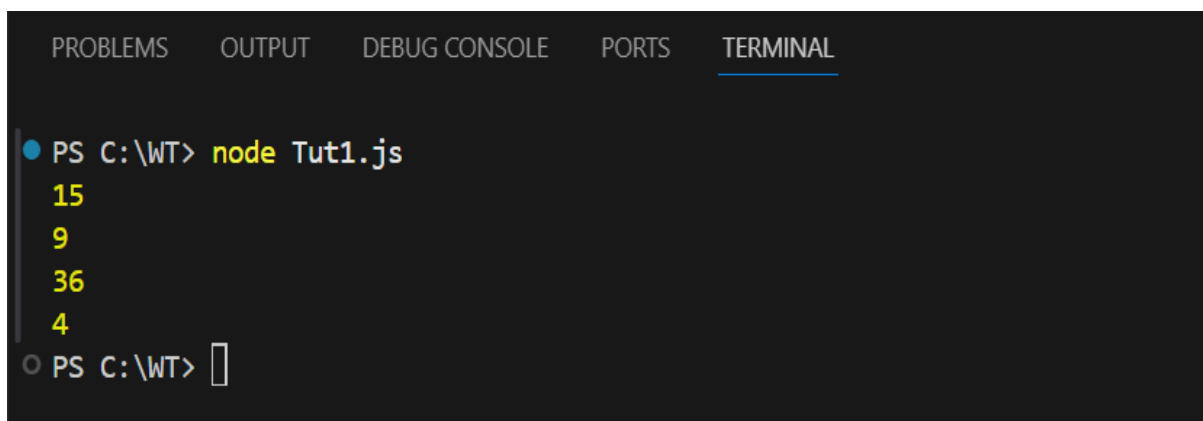
```
    console.log(num1*num2);
```

```
    console.log(num1/num2);
```

```
}
```

```
myfun(12,3);
```

Output :

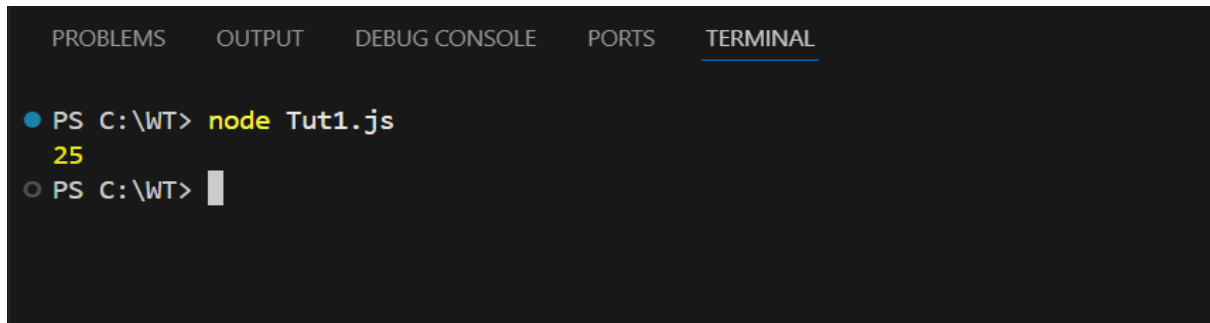


```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL

● PS C:\WT> node Tut1.js
15
9
36
4
○ PS C:\WT> 
```

```
function myfun(x,y)
{
    return x*y;
}
console.log(myfun(5,5));
```

Output :

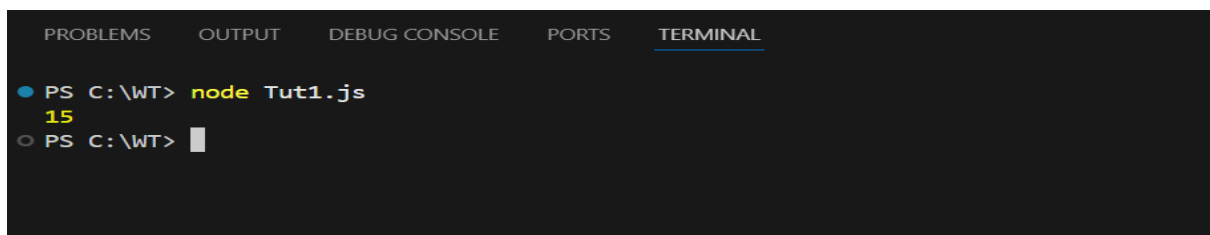
A screenshot of a VS Code terminal window. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, PORTS, and TERMINAL, with TERMINAL selected. The prompt is PS C:\WT> and the command node Tut1.js has been executed. The output is 25. The prompt is now PS C:\WT> with a cursor.

```
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
PS C:\WT> node Tut1.js
25
PS C:\WT> 
```

Continuation passing cycle

```
function displayresult(some)
{
    console.log(some);
}
function multiply(x,y,callback)
{
    let z=x*y;
    callback(z);
}
multiply(3,5,displayresult)
```

Output :

A screenshot of a VS Code terminal window. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, PORTS, and TERMINAL, with TERMINAL selected. The prompt is PS C:\WT> and the command node Tut1.js has been executed. The output is 15. The prompt is now PS C:\WT> with a cursor.

```
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
PS C:\WT> node Tut1.js
15
PS C:\WT> 
```

Creating our own module

Ownmodule.js

```
exports.myDateTime=function()  
{  
    return Date();  
}
```

Tut1.js

```
var dt=require('./ownmodule');  
console.log(dt.myDateTime());
```

Output :

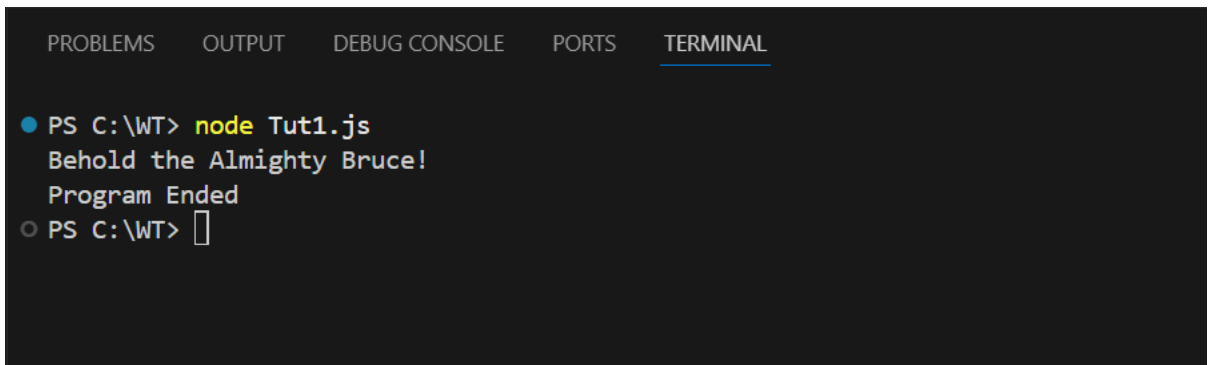


```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL  
● PS C:\WT> node Tut1.js  
  Fri Dec 13 2024 18:15:23 GMT+0530 (India Standard Time)  
○ PS C:\WT> 
```

Blocking code

```
var fs=require('fs');  
var data=fs.readFileSync('input.txt');  
console.log(data.toString());  
console.log("Program Ended");
```

Output :

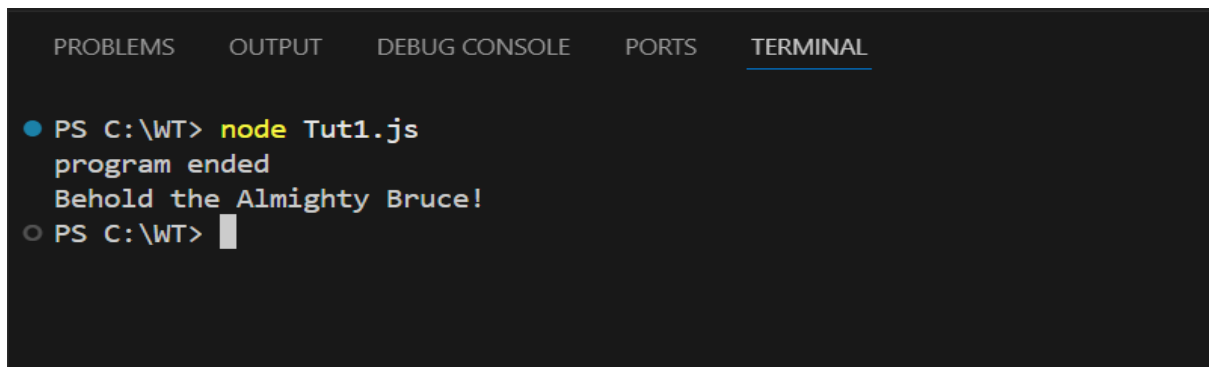


```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL  
● PS C:\WT> node Tut1.js  
  Behold the Almighty Bruce!  
  Program Ended  
○ PS C:\WT> 
```

Non-Blocking Code

```
var fs=require('fs');  
fs.readFile('input.txt',function(err,data){  
    if(err)  
    {  
        return console.error(err);  
    }  
    console.log(data.toString());  
});  
console.log("program ended");
```

Output :



The screenshot shows a terminal window with a dark background. At the top, there are tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'PORTS', and 'TERMINAL', with 'TERMINAL' being the active tab. The terminal content shows a command prompt 'PS C:\WT>' followed by the command 'node Tut1.js'. The output of the command is 'program ended' and 'Behold the Almighty Bruce!'. The prompt is then shown again as 'PS C:\WT>' with a cursor.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL  
● PS C:\WT> node Tut1.js  
  program ended  
  Behold the Almighty Bruce!  
○ PS C:\WT> █
```