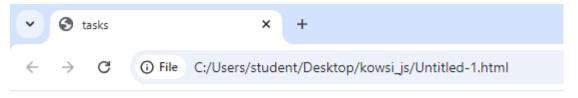
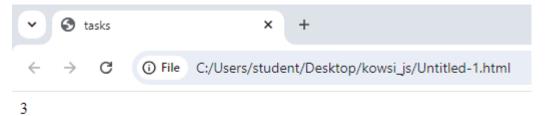
```
Advance java
task 1:
<html>
<head>
     <title>tasks</title>
</head>
<body>
     <script>
      function fact(num){
          if(num==0){
              return 1;
         }
          else{
              return num*fact(num-1);
          }
          }
          let res=fact(parseInt(prompt("enter n:")));
          document.writeln(res);
          </script>
          </body>
          </html>
output:
```



24

```
task 2:
<head>
     <title>tasks</title>
</head>
<body>
     <script>
      function fib(n){
          if(n<=1){
               return n;
          }
          else{
               return fib(n-1)+fib(n-2);
          }
      }
          const n=parseInt(prompt("enter n:"));
          let res=fib(n-1);
          document.writeln(res);
          </script>
          </body>
          </html>
```

output:



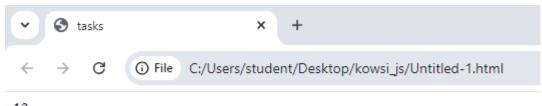
task 3: <html> <head> <title>tasks</title> </head> <body> <script> function climb(n){ if(n==0){ return 1; } if(n<1){ return 0; } else{ return climb(n-1)+climb(n-2)+climb(n-3); }

}

```
let res= climb(parseInt(prompt("enter n:")));
document.writeIn(res);

</script>
</body>
</html>
```

output:



13

```
task 4:

<html>

<head>

<title>tasks</title>

</head>

<body>

<script>

let arr=[1,[1,2,3],[2,3,4],2,3,[4,5,6]];

console.log(arr.flat());

</script>

</body>

</html>
```

output:

```
K [
             Elements
                         Console
                                               Network >>
                                    Sources
 I▶
                         ▼ Filter
                                                    Default levels ▼ 1 Issue: ■ 1
            top ▼ O
 €3
     ▶ (12) [1, 1, 2, 3, 2, 3, 4, 2, 3, 4, 5, 6]
                                                          Untitled-1.html:8
task 5:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    function toh(n,from_rod,to_rod,des){
       if(n==0){
         return;
      }
       else
      toh(n-1,from_rod,des,to_rod);
    document.writeIn("move rod"+n+" "+"from_rod"+from_rod+" "+"to_rod"+to_rod+"<br>");
    toh(n-1,des,to_rod,from_rod);
  }
  var N=parseInt(prompt("enter n"));
  toh(N,'A','C','B');
```

```
</script>
</body>
</html>
output:
          Document
                            C:/Users/student/Desktop/kowsi_js/Untitled-1.html
 move rod1 from_rodA to_rodC
 move rod2 from_rodA to_rodB
 move rod1 from_rodC to_rodB
 move rod3 from_rodA to_rodC
 move rod1 from_rodB to_rodA
 move rod2 from_rodB to_rodC
 move rod1 from_rodA to_rodC
task 6:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    function sum(a) {
    var s = 0;
    for (var i=0; i < arguments.length; i++) {
         s += arguments[i];
```

```
}
     return s;
}
     let x = sum(3,2,1);
       document.writeln(x);
  </script>
</body>
</html>
output:
                                       ×
       Ocument
                    File C:/Users/student/Desktop/kowsi_js/Untitled-1.html
 6
task 7:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    function fun(...args){
       let sum=0;
```

```
for(let i=0;i<arr.length;i++)</pre>
          {sum += arr[i];}
          return sum;
     }
    let arr=[3,2,1]
     let x = fun(arr);
       document.writeln(x);
  </script>
</body>
</html>
output:
           Document
                                         ×
                     i File C:/Users/student/Desktop/kowsi_js/Untitled-1.html
 6
task 8:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
```

```
<body>
  <script>
   let obj={a:1,b:2,c:3};
   let cloneobj={};
   cloneobj= JSON.parse(JSON.stringify(obj));
   console.log(cloneobj);
  </script>
</body>
</html>
output:
 K [0
                                                                       €}3
                                               Network >>
                                                                                 X
             Elements
                         Console
                                    Sources
            top ▼ 💿 🍸 Filter
                                                  Default levels ▼
                                                                     No Issues
     ▶ {a: 1, b: 2, c: 3}
                                                            Untitled-1.html:13
task 9:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
   function x(){
    let o1={a:1,b:2};
```

```
let o2={c:3,d:6};
    let o={...o1,...o2};
    return o;
   }
let ans=x();
console.log(ans);
   </script>
</body>
</html>
output:
  K [0
              Elements
                         Console
                                              Network
                                                       >>
                                    Sources
  Default levels ▼
                                                                  No Issues
      ▶ {a: 1, b: 2, c: 3, d: 6}
                                                          Untitled-1.html:17
   >
task 10:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
   let obj={name:"rish",age:19
   };
   console.log(obj);
```

```
let stringobj=JSON.stringify(obj);
   console.log(stringobj);
   let pobj=JSON.parse(stringobj);
   console.log(pobj);
   </script>
</body>
</html>
output:
K [0
                                                                     (
                                              Network >>
            Elements
                        Console
                                   Sources
           Default levels ▼
                                                                  No Issues
     ▶ {name: 'rish', age: 19}
                                                         Untitled-1.html:12
    {"name":"rish","age":19}
                                                         Untitled-1.html:14
     ▶ {name: 'rish', age: 19}
                                                         Untitled-1.html:16
task 11:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
   function a(){
    let x="hello,";
    return function(name){
```

```
console.log(x+""+name);
    }
   }
   const r=a();
   r("rishaali");
   r("deepa");
   </script>
</body>
</html>
output:
 K [0
                                                                        ($)
                                                Network >>
              Elements
                          Console
                                     Sources

▼ Filter
  ₽
             top ▼
                                                   Default levels ▼
                                                                     No Issues
     hello,rishaali
                                                            Untitled-1.html:13
     hello,deepa
                                                            Untitled-1.html:13
task 12:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
```

```
function a(){
    let x=0;
    return function(){
          χ++;
       console.log(x);
    }
   }
   const r=a();
   r();
   r();
   </script>
</body>
</html>
output:
  K [0
                                                                         ($)
              Elements
                          Console
                                                Network >>
                                                                                  ×
                                     Sources
                                                   Default levels ▼
  ₽
      0
             top ▼
                            ▼ Filter
                                                                      No Issues
     1
                                                            Untitled-1.html:14
     2
                                                            Untitled-1.html:14
task 13:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>Document</title>
</head>
<body>
  <script>
   function a(){
    let x=0;
    return function(){
          χ++;
       console.log(x);
    }
   }
   const r=a();
   const m=a();
   r();
   r();
  m();
   </script>
</body>
</html>
output:
 <u>K</u> [0

⊕ : ×

                                               Network >>
             Elements
                         Console
                                    Sources
 Þ
            top ▼
                                                                    No Issues
                           ▼ Filter
                                                  Default levels ▼
                                                           Untitled-1.html:14
    1
    2
                                                           Untitled-1.html:14
    1
                                                           Untitled-1.html:14
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
   function a(){
     let x=0;
     return{
           increment:function(){
            x++;
            console.log(x);
           },
           getcount:function(){
            return x;
           }
    }
   }
   const r=a();
   r.increment();
   console.log(r.getcount());
   </script>
</body>
</html>
output:
```



Output:

```
K [0
                                                Performance >>
           Elements
                     Console
                              Sources
                                      Network
  top ▼ 🔘 🍸 Filter
                                               Default levels ▼ No Issues 🕃
    2
                                                      Untitled-1.html:13
    5
                                                      Untitled-1.html:13
    2
                                                      Untitled-1.html:17
Task 16:
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <script>
        let myPromise= new Promise(function(resolve){
            setTimeout(()=>{resolve("hello good evening!");},3000)
        myPromise.then(
            function(value){
                console.log(value);
    </script>
</body>
</html>
Output:
K [0
          Elements
                    Console
                             Sources
                                     Network
                                              Perf
Defa
   hello good evening!
Task 17:
Task 18:
<!DOCTYPE html>
<html lang="en">
```

```
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <script>
        function a(n){
            return new Promise((resolve, reject)=>{
            setTimeout(()=>{
                if(n==1)
                resolve("one");
            reject("error");},3000)
        a(1)
        .then((value)=>{
                 console.log(value);
    </script>
</body>
</html>
Output:
  K [0
                                                 Performance >>
            Elements
                      Console
                               Sources
                                        Network
  Default levels ▼
                                                              No Is
                                                        Untitled-1.h
     one
Task 19:
task 20:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
```

```
<body>
  <script>
   let fetchdata=(id)=>{
     return new Promise(function(resolve,reject){
  setTimeout(()=>{if(id==1)resolve({id,data:"hello"});
else
reject("error computed");},3000);
    });
   }
   fetchdata(1)
   .then((response)=>{
    console.log("data:",response);
     return response.data.toUpperCase();
   })
    .then((transformedData)=>{
    console.log("trasformed data:",transformedData);
   })
   .catch((error)=>{
    console.log("error occured:",error);
   });
   </script>
</body>
</html>
output:
```

```
task 21:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
   let fetchdata=(id)=>{
     return new Promise(function(resolve,reject){
  setTimeout(()=>{if(id==1)resolve({id,data:"hello"});
else
reject("error computed");},3000);
    });
   }
   const a= async (id)=>{
    try{
   const response= await fetchdata(id);
```

```
console.log("data:",response);
    const transformedData=await response.data.toUpperCase();
    console.log("transformed data:",transformedData);
   }
   catch(error){
    console.log("error occured:",error);
   }};
   a(1);
   </script>
</body>
</html>
output:
 K [0
            Elements
                       Console
                                 Sources
                                           Network
                                                      Performance >>
           Default levels ▼
                                                                      No Issues
                                                                      ii.html:21
   data: ▶ {id: 1, data: 'hello'}
    transformed data: HELLO
                                                                      ii.html:23
task 22:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
```

```
const fetchdata=async()=>{
     try{
         const response=await fetch('https://jsonplaceholder.typicode.com/posts');
         const info=await response.json();
         console.log(info);
     }catch(error){
         console.log("error occured");
    }
 };
 fetchdata();
   </script>
</body>
</html>
output:
       ▶ 0: {userId: 1, id: 1, title: 'sunt aut facere repellat provident occa
       ▶ 1: {userId: 1, id: 2, title: 'qui est esse', body: 'est rerum tempore
       ▶ 2: {userId: 1, id: 3, title: 'ea molestias quasi exercitationem repel
       ▶ 3: {userId: 1, id: 4, title: 'eum et est occaecati', body: 'ullam et
       ▶ 4: {userId: 1, id: 5, title: 'nesciunt quas odio', body: 'repudiandae
       ▶ 5: {userId: 1, id: 6, title: 'dolorem eum magni eos aperiam quia', bo
       ▶ 6: {userId: 1, id: 7, title: 'magnam facilis autem', body: 'dolore pl
task 23:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
```

```
const fetchdata=async()=>{
    try{
         const response=await fetch('https://jsonplaceholder.typicode.com/posts');
         const info=await response.json();
         console.log(info);
     }catch(error){
         console.log("error occured");
    }
 };
 fetchdata();
   </script>
</body>
</html>
output:
       ▶ 0: {userId: 1, id: 1, title: 'sunt aut facere repellat provident occa
       ▶ 1: {userId: 1, id: 2, title: 'qui est esse', body: 'est rerum tempore
       ▶ 2: {userId: 1, id: 3, title: 'ea molestias quasi exercitationem repel
       ▶ 3: {userId: 1, id: 4, title: 'eum et est occaecati', body: 'ullam et
       ▶ 4: {userId: 1, id: 5, title: 'nesciunt quas odio', body: 'repudiandae
task 24:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
     const f1=()=>new Promise((resolve)=>{
```

```
setTimeout(()=>{
            resolve("hello");
         },3000)
   }
   );const f2=()=>new Promise((resolve)=>{
         setTimeout(()=>{
            resolve("hi");
         },3000)
   }
   );
   const f3=()=>new Promise((resolve)=>{
         setTimeout(()=>{
             resolve("rishaali....");
         },3000)
   }
   );
const fetchdata=async()=>{
   try{
         const [a1,a2,a3]=await Promise.all([f1(),f2(),f3()]);
         console.log(a1);
         console.log(a2);
         console.log(a3);
   }catch(error){
         console.log("error occured");
   }
};
fetchdata();
```

```
</script>
</body>
</html>
output:
 K [0
                                                        Performance >>
                                                                           (3)
                                                                                    ×
             Elements
                        Console
                                   Sources
                                             Network
                                                                        No Issues 🔯
                          ▼ Filter
                                                       Default levels ▼
            top ▼
                                                                        ii.html:31
    hello
    hi
                                                                        ii.html:32
    rishaali....
                                                                        ii.html:33
task 25:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
     const f1=()=>new Promise((resolve)=>{
         setTimeout(()=>{
             resolve({name:"rish"});
         },3000)
    }
    );const f2=()=>new Promise((resolve)=>{
         setTimeout(()=>{
             resolve({name:"mir"});
```

```
},3000)
     }
     );
     const f3=()=>new Promise((resolve)=>{
          setTimeout(()=>{
              resolve({name:"deepa"});
          },3000)
    }
     );
 const fetchdata=async()=>{
     try{
          const [a1,a2,a3]=await Promise.all([f1(),f2(),f3()]);
          console.log(a1);
          console.log(a2);
          console.log(a3);
     }catch(error){
          console.log("error occured");
     }
 };
 fetchdata();
    </script>
</body>
</html>
output:
```

```
K [0
                                                                  €3
          Elements
                    Console
                             Sources
                                       Network
                                                 Performance >>
I op ▼    ▼ Filter
                                                Default levels ▼
                                                               No Issues 🔯
                                                               ii.html:31
   ▶ {name: 'rish'}
   ▶ {name: 'mir'}
                                                               ii.html:32
   ▶ {name: 'deepa'}
                                                               ii.html:33
```

```
task 26:
module.js
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
</head>
<body>
    <h1>hi...</h1>
    <script type="module" src="main.js"></script>
</body>
</html>
main.js
import greet from './greet.js';
export default function main(){
 greet();
}
main();
greet.js
```

```
export default function greet(){
      var a="Hello,Good Morning!!";
      console.log(a);
}
output:
② □ ⊕ Document × +
← C ① 127.0.0.1:5500/module.html
                                                                                □ □ □ \( \langle \) \( \langle \)
hi...
                                                                                Live reload enabled.
Hello,Good Morning!!
                                                                                                                  greet.is:3
task 27:
module.html:
<!DOCTYPE html>
<html lang="en">
<head>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
      <title>Document</title>
</head>
<body>
      <script type="module" src="main.js"></script>
</body>
</html>
main.js
import greet from './greet.js';
export default function main(){
 greet();
```

```
main();
greet.js
export default function greet(){
    var a="welcome";
    const b=[ {name:"rish",place:"hosur"},{name:"deepa",place:"ooty"}];
     console.log(a);
   console.log(b);
}
output
                              Console
                                                  Default levels ▼
                                                                    No Issues
                        6
                               welcome
                                                                         greet.js:4
                                                                         greet.js:5
       ▼ (2) [{...}, {...}] 1
         ▶0: {name: 'rish', place: 'hosur'}
         ▶ 1: {name: 'deepa', place: 'ooty'}
           length: 2
          ▶ [[Prototype]]: Array(0)
task 28:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
</head>
<body>
     <script type="module" src="main.js"></script>
</body>
</html>
```

```
import {greet} from './greet.js';
export function main(){
 greet();
}
main();
export function greet(){
     console.log("named modules!!")
}
output:
                               Console
                                                   Default levels ▼
        named modules!!
task 29:
module.js
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
</head>
<body>
     <script type="module" src="main.js"></script>
</body>
</html>
```

```
main.js:
import {greet} from './greet.js';
export default function main(){
 greet();
}
main();
greet.js
export function greet(){
     console.log("named modules!!")
}
output:
                               Console
                                                                     No Issues
                               Default levels ▼
                        6
        named modules!!
                                                                          greet.js:2
task 30:
module.html
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
</head>
<body>
     <script type="module" src="run.js"></script>
```

```
</body>
</html>
run.js
import sum from './sum.js';
export default function run(){
   const res= sum(3,2);
    console.log(`result is ${res}`);
}
run();
sum.js
export default function sum( a, b){
return a+b;
}
output:
                            Console
                          ≡ Filter
                                                                   No Issues
                      6
                                                 Default levels ▼
     result is 5
                                                                          run.js:4
task 31:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
</head>
<body>
```

```
Hi!!
     <script>
         const a=document.getElementById("one");
         console.log(a.textContent);
         a.textContent="Bye";
         console.log(a.textContent);
     </script>
</body>
</html>
← ♂ ① 127.0.0.1:5500/module.html
                                                           module.html:12
module.html:14
task 32:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
     <style>
         #btn{
              background-color: antiquewhite;
              height: 100px;
              width:100px;
         }
     </style>
</head>
<body>
```

```
<button onclick="change()" id="btn">change</button>
    <script>
         var a=document.getElementById("btn");
         function change(){
             a.style.backgroundColor="red";
         }
    </script>
</body>
</html>
                 i 127.0.0.1:5500/
      change
task 33:
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
  monday
    tuesday
    <button onclick="add()">add</button>
```

```
<script>
         function add(){
         var a=document.getElementById("one");
         var b=document.createElement("li");
         b.textContent="wednesday";
         a.append(b);
         }
    </script>
</body>
</html>
                    127.0.0.1:5500/m

    monday

    tuesday

        add

    wednesday

task 34:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
     <style>
         #one{
              background-color: antiquewhite;
         }
         #btn{
```

```
height: 100px;
               width:100px;
          }
     </style>
</head>
<body>
     <button onclick="add()">togglevisibility</button>
  <div id="one">hi...hello!!</div>
     <script>
          function add(){
     const a=document.getElementById("one");
     if(a.style.display==="none"){
          a.style.display="block";
     }
     else{
          a.style.display="none";
     }
          }
     </script>
</body>
</html>
 togglevisibility
                                                                                              ← C (
          i) 127.0.0.1:5500/module.html
 togglevisibility
```

```
task 35:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <title>Document</title>
<style>
     .width{\{}
background-color: aqua;
width:300px;
              }
#one{
     height: 100px;
    width:100px;
     background-color: bisque;
}
</style>
</head>
<body>
     <div class="width" id="one" >
  <button onclick="change()" id="btn">change</button>
</div>
     <script>
           function change(){
         var a=document.getElementById("btn");
         var b=document.getElementById("one");
              a.style.backgroundColor="red";
              b.setAttribute("class","width");
```

```
</script>
</body>
</html>
Document

127.0.0.1:5

change
```