

Petunjuk Pengerjaan

Dokumen ini memang **tidak open access untuk edit**, maka **download lah file ini lalu kerjakanlah pada device masing-masing**, dengan cara **klik file** pada pojok kiri, **pilih download**, dan **pilihlah Microsoft Powerpoint .pptx**. Untuk mengerjakan, perhatikan perintah dibawah ini:

1. Uji pengetahuan kamu dengan mengisi post test pada link berikut <https://bit.ly/PostTestSCBackendSept2024>
2. Buatlah rangkuman untuk materi yang kamu pelajari hari ini pada slide 3, jika tidak cukup, boleh kamu tambahkan slide. Link Recording : https://youtube.com/live/8YXsXua_Nfw
3. Akseslah web yang terdapat pada slide 4 dan lakukanlah praktik sesuai dengan arahan pemateri pada saat kelas berlangsung. Screenshot-lah hasil dari practice di web tersebut, dan tempatkan screenshot tersebut pada slide 5.
4. Uploadlah pekerjaanmu di salah satu media sosialmu. Yang di upload boleh berupa file ppt maupun file screenshot dari file ini. (silde 2-6). Sertakan caption tentang pengalaman belajar bersama MySkill. Jangan lupa tag MySkill dan gunakanlah hashtag #learnatmyskill
5. Link postingan twibbon dan mini task ini di social mediamu bisa kamu input di <https://bit.ly/ClaimSertifSCSoftwareEngineeringSept2024> maksimal pada **Jum'at, 20 September 2024 pukul 23.59 WIB** sebagai presensi dan sebagai cara kamu untuk mendapatkan sertifikat nantinya (sertifikat maksimal akan dikirim melalui grup telegram pada H+7 setelah form ditutup)



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Portofolio - Short Class

Backend Development

Owner: Ika Nurfitriani

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Course Summary



Poin Belajar	Rangkuman
Pengenalan Backend	<p>Seorang developer yang merancang perangkat lunak dari sisi server berhubungan dengan logika dan database dengan menggunakan bahasa pemrograman khusus. Beberapa tugas backend developer diantaranya:</p> <ul style="list-style-type: none">- Merancang struktur model data- Membuat kode program untuk aplikasi agar lebih aman- Mengatasi setiap permasalahan yang muncul di sisi server- Mengembangkan kode program dan melakukan testing- Membuat ide dan konsep untuk ditambahkan pada produk aplikasi- Meningkatkan struktur data yang sudah ada
Karir sebagai Backend Developer	<ol style="list-style-type: none">1. Peluang: Terdapat banyak peluang untuk bekerja sebagai backend developer.2. Salary: Gaji rata-rata untuk backend developer adalah Rp 9 juta per bulan di Indonesia (Tahun 2022).
Tools, Persiapan dan Konsep Pemrograman	<ol style="list-style-type: none">1. Basic knowledge: Internet, Basic Frontend, OS, Learn Programming Language, Database, API.2. Top 7 Programming Languages for Backend Web Development: Javascript, Python, PHP, Java, Ruby, Golang, C#.3. Tools: Text Editor (VS Code), API Playground/APP (Postman), VCS (GitHub)4. Konsep Pemrograman: Variabel, Konstanta, Function, Array, Objek, Kondisional, Perulangan



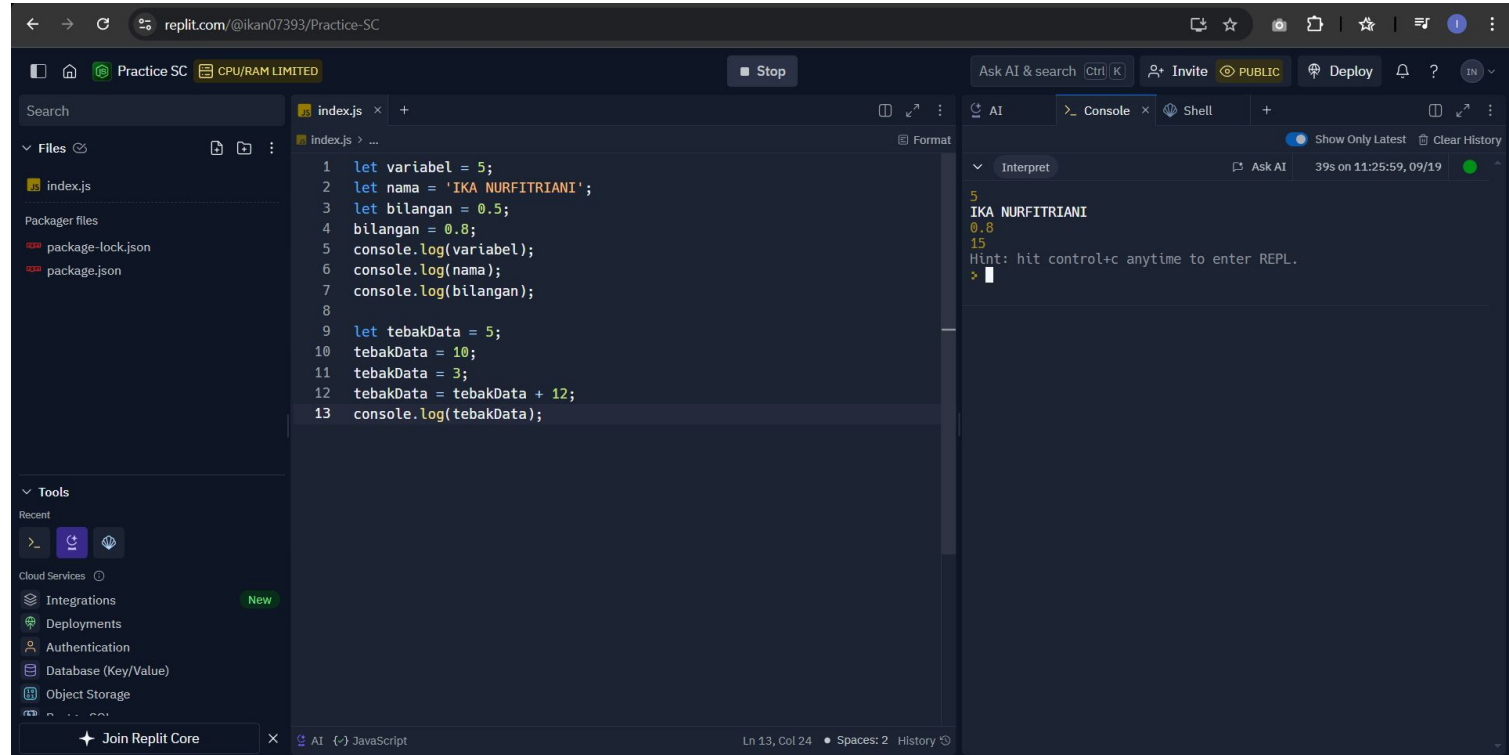
Link Practice

Berikut adalah Link Code yang digunakan untuk practice pada sesi short class Software Engineer - Intro to Backend Development. Akses link berikut sesuai dengan arahan tutor pada saat sesi berlangsung

- <https://replit.com/@zikazama/variable#index.js>
- <https://replit.com/@zikazama/constant>
- <https://replit.com/@zikazama/function>
- <https://replit.com/@zikazama/array#index.js>
- <https://replit.com/@zikazama/object#index.js>
- <https://replit.com/@zikazama/conditional>
- <https://replit.com/@zikazama/looping#index.js>

Hasil Practice

- <https://replit.com/@zikazama/variable#index.js>



The screenshot shows a Replit IDE interface. The main editor displays a file named `index.js` with the following JavaScript code:

```
1 let variabel = 5;
2 let nama = 'IKA NURFITRIANI';
3 let bilangan = 0.5;
4 bilangan = 0.8;
5 console.log(variabel);
6 console.log(nama);
7 console.log(bilangan);
8
9 let tebakData = 5;
10 tebakData = 10;
11 tebakData = 3;
12 tebakData = tebakData + 12;
13 console.log(tebakData);
```

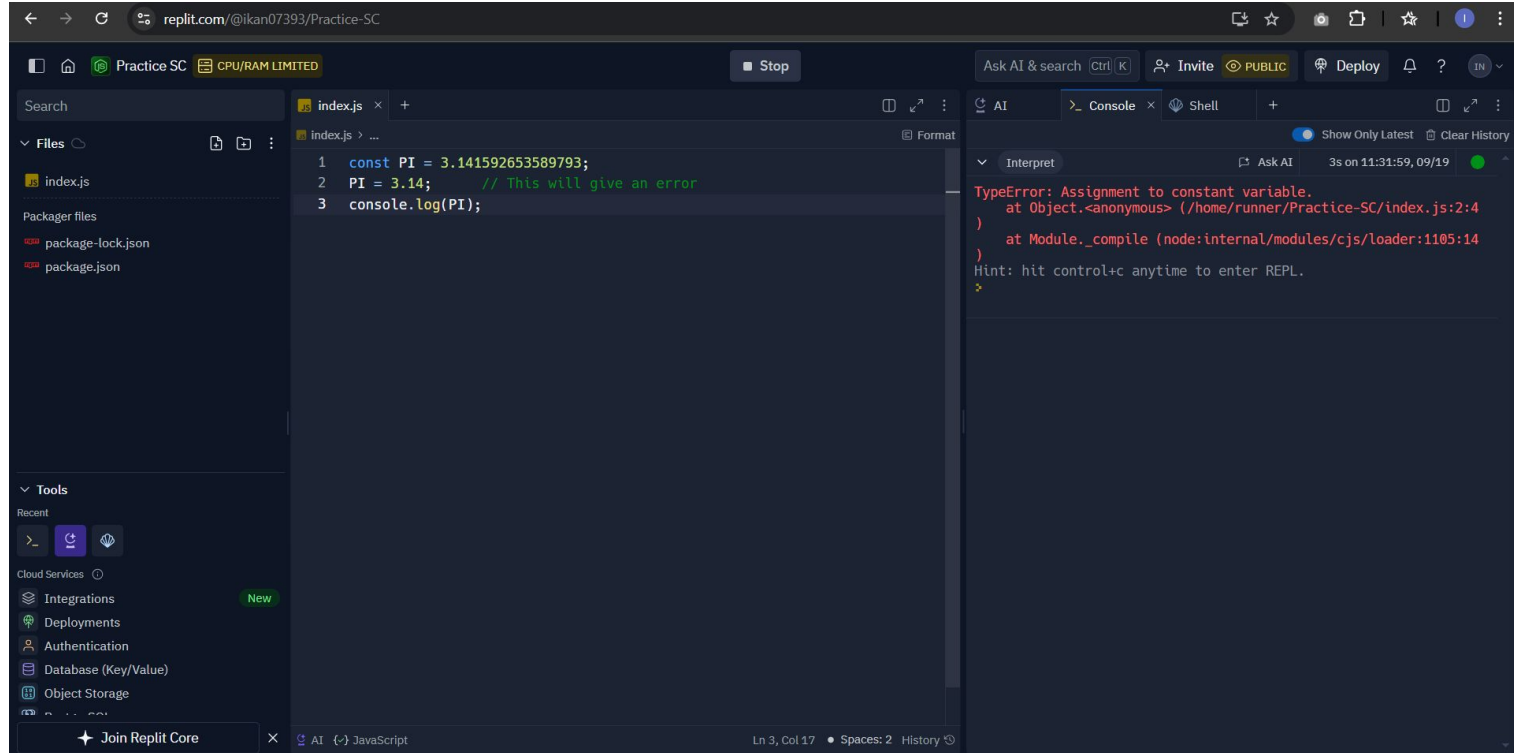
The console output on the right shows the results of the code execution:

```
5
IKA NURFITRIANI
0.8
15
Hint: hit control+c anytime to enter REPL.
>
```

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Hasil Practice

- <https://replit.com/@zikazama/constant>



The screenshot shows a Replit IDE interface for a project named "Practice SC". The main editor displays the file `index.js` with the following code:

```
1 const PI = 3.141592653589793;  
2 PI = 3.14; // This will give an error  
3 console.log(PI);
```

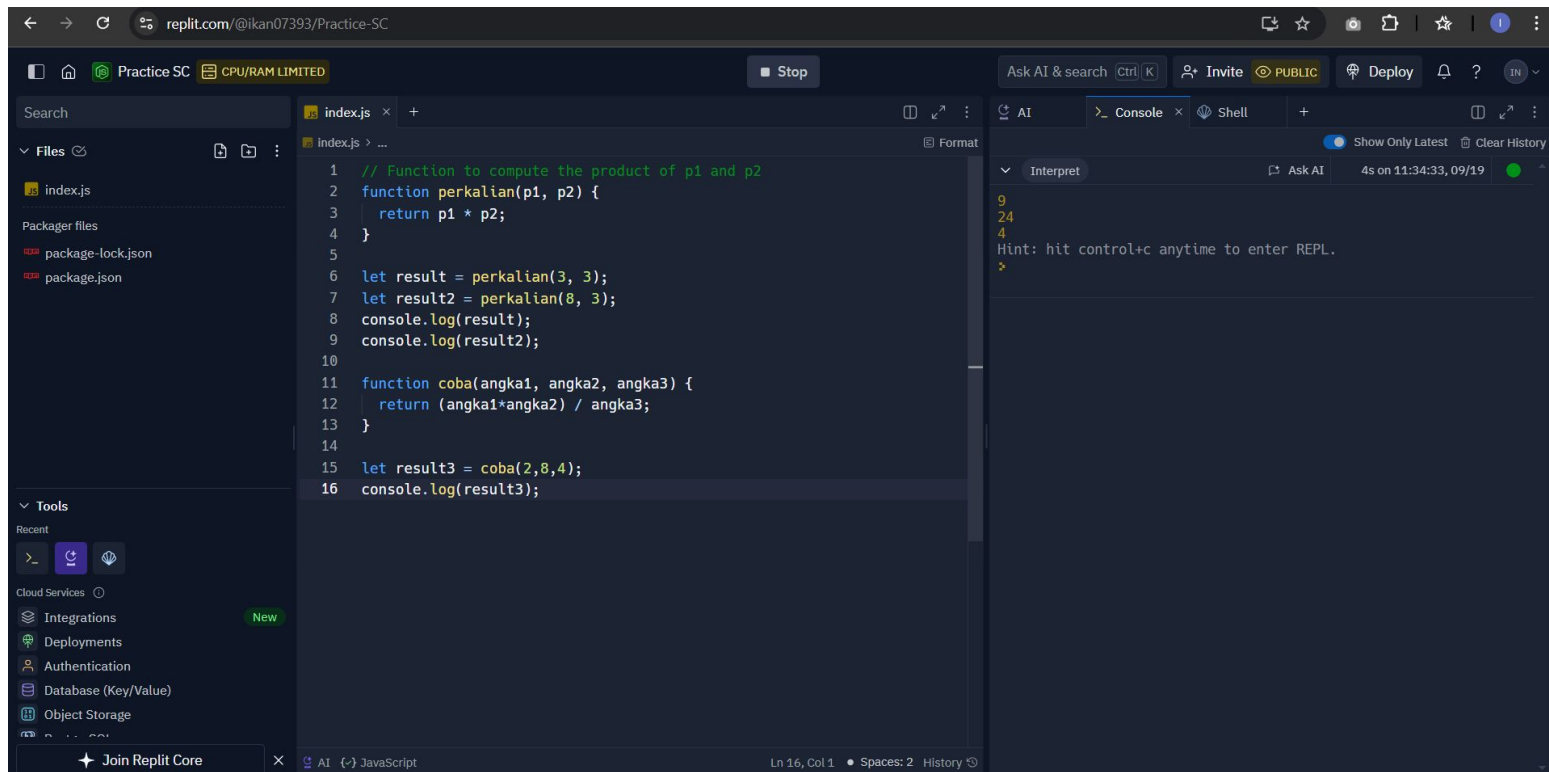
The console on the right shows a runtime error:

```
TypeError: Assignment to constant variable.  
    at Object.<anonymous> (/home/runner/Practice-SC/index.js:2:4)  
    at Module._compile (node:internal/modules/cjs/loader:1105:14)  
    at Module._extensions..js (node:internal/modules/cjs/loader:1163:10)  
    at Module.load (node:internal/modules/cjs/loader:981:32)  
    at Module._load (node:internal/modules/cjs/loader:822:12)  
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:82:12)  
    at node:internal/main/run_main_module:22:47
```

The error message indicates a "TypeError: Assignment to constant variable." because the variable `PI`, which was declared as a constant, is being reassigned on line 2.

Hasil Practice

- <https://replit.com/@zikazama/function>



The screenshot shows a Replit IDE interface for a project named "Practice SC". The left sidebar displays the file explorer with "index.js" selected. The main editor area shows the following JavaScript code:

```
1 // Function to compute the product of p1 and p2
2 function perkalian(p1, p2) {
3   return p1 * p2;
4 }
5
6 let result = perkalian(3, 3);
7 let result2 = perkalian(8, 3);
8 console.log(result);
9 console.log(result2);
10
11 function coba(angka1, angka2, angka3) {
12   return (angka1*angka2) / angka3;
13 }
14
15 let result3 = coba(2,8,4);
16 console.log(result3);
```

The right sidebar shows the console output with the results of the function calls:

```
9
24
4
Hint: hit control+c anytime to enter REPL.
```

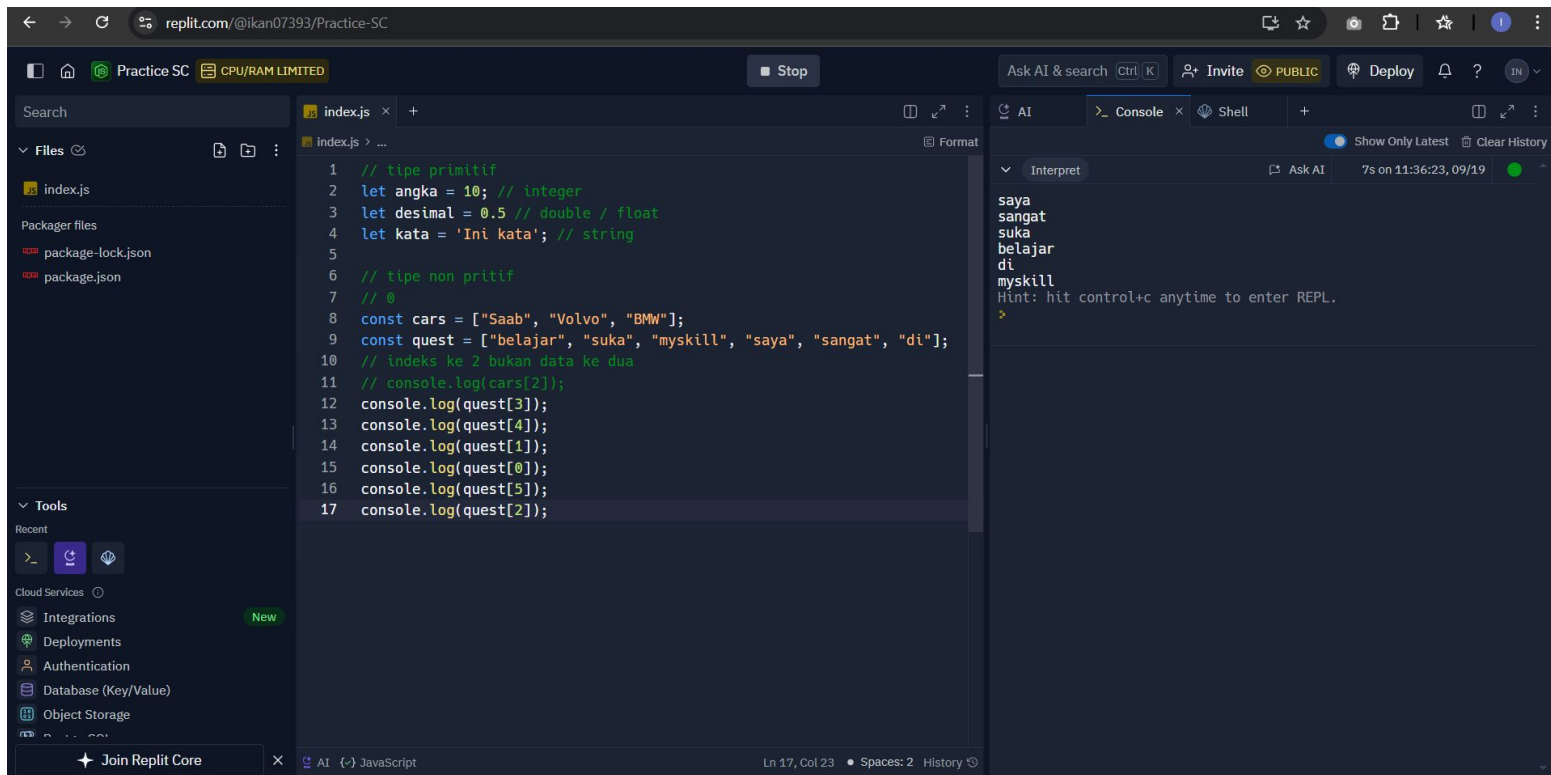
The status bar at the bottom indicates "Ln 16, Col 1" and "Spaces: 2".

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Hasil Practice

- <https://replit.com/@zikazama/array#index.js>



The screenshot shows a Replit IDE interface. The main editor displays a file named `index.js` with the following JavaScript code:

```
1 // tipe primitif
2 let angka = 10; // integer
3 let desimal = 0.5 // double / float
4 let kata = 'Ini kata'; // string
5
6 // tipe non primitif
7 // 0
8 const cars = ["Saab", "Volvo", "BMW"];
9 const quest = ["belajar", "suka", "myskill", "saya", "sangat", "di"];
10 // indeks ke 2 bukan data ke dua
11 // console.log(cars[2]);
12 console.log(quest[3]);
13 console.log(quest[4]);
14 console.log(quest[1]);
15 console.log(quest[0]);
16 console.log(quest[5]);
17 console.log(quest[2]);
```

The left sidebar shows the file explorer with `index.js` and `package.json`. The bottom status bar indicates the current position is `Ln 17, Col 23` with `Spaces: 2`.

The right sidebar shows the console output with the following text:

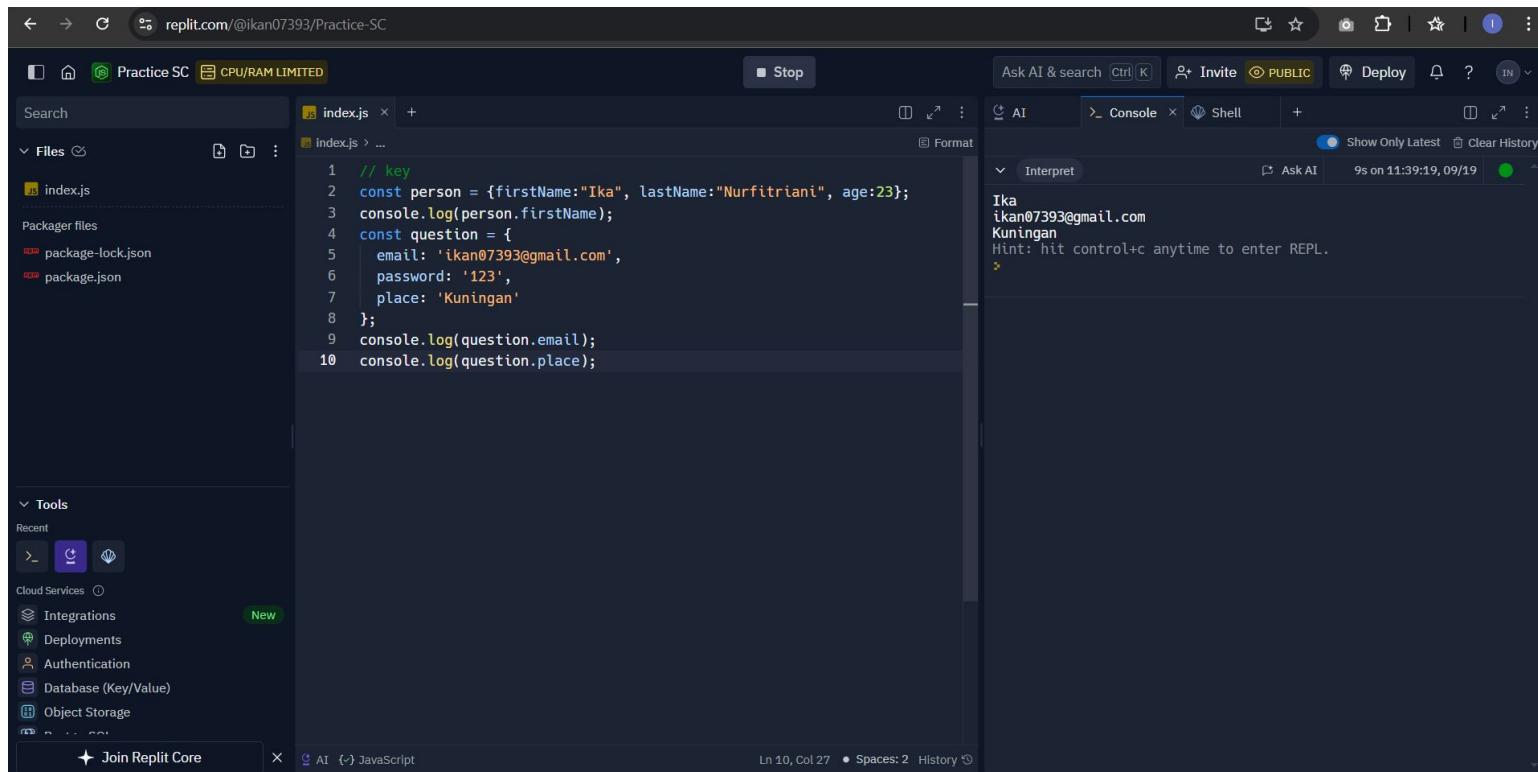
```
saya
sangat
suka
belajar
di
myskill
Hint: hit control+c anytime to enter REPL.
```

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Hasil Practice

- <https://replit.com/@zikazama/object#index.js>



The screenshot shows a Replit workspace for a file named 'index.js'. The code defines a 'person' object and a 'question' object, then logs their email and place properties. The terminal output shows the execution results: 'Ika' and 'ikan07393@gmail.com' for the first log, and 'Kuningan' for the second log. The interface includes a file explorer, a tools panel, and a status bar at the bottom.

```
1 // key
2 const person = {firstName:"Ika", lastName:"Nurfitriani", age:23};
3 console.log(person.firstName);
4 const question = {
5   email: 'ikan07393@gmail.com',
6   password: '123',
7   place: 'Kuningan'
8 };
9 console.log(question.email);
10 console.log(question.place);
```

Interpret

Ika
ikan07393@gmail.com
Kuningan
Hint: hit control+c anytime to enter REPL.

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Hasil Practice

- <https://replit.com/@zikazama/conditional>

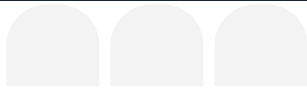


The screenshot shows a Replit web editor interface. The browser address bar displays `replit.com/@ikan07393/Practice-SC`. The editor has a dark theme. On the left sidebar, the 'Files' section shows `index.js`, `package-lock.json`, and `package.json`. The 'Tools' section lists various services like Integrations, Deployments, Authentication, Database, and Object Storage. The main editor area shows a file named `index.js` with the following JavaScript code:

```
1 let hour = 11;
2 let greeting = '';
3 if (hour < 18) {
4   greeting = "Good day";
5 } else if (hour < 22) {
6   greeting = "normal day";
7 } else {
8   greeting = "Bad day";
9 }
10 console.log(greeting);
```

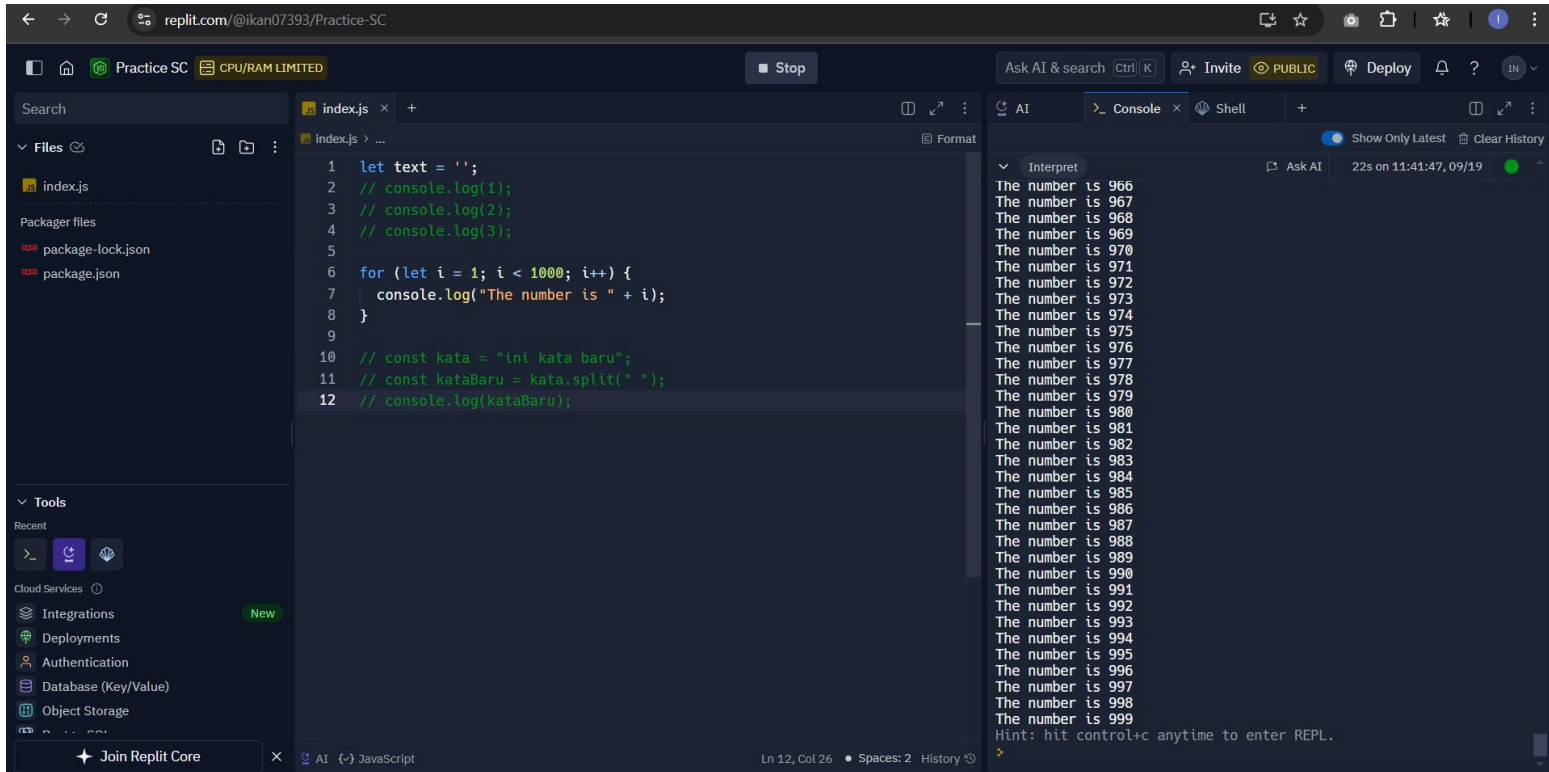
On the right side, the 'Console' tab is active, showing the output: `Good day`. Below the output, a hint says: `Hint: hit control+c anytime to enter REPL.`. The status bar at the bottom indicates 'Ln 1, Col 14' and 'Spaces: 2'.

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Hasil Practice

- <https://replit.com/@zikazama/looping#index.js>



The screenshot shows a Replit IDE interface for a project named "Practice SC". The main editor displays a JavaScript file named "index.js" with the following code:

```
1 let text = '';
2 // console.log(1);
3 // console.log(2);
4 // console.log(3);
5
6 for (let i = 1; i < 1000; i++) {
7   console.log("The number is " + i);
8 }
9
10 // const kata = "ini kata baru";
11 // const kataBaru = kata.split(" ");
12 // console.log(kataBaru);
```

The right-hand pane shows the "Interpret" tab, displaying the output of the code execution. It shows a list of numbers from 1 to 999, each followed by "The number is". The output is truncated, showing only the first 20 lines of the loop's output.

The bottom status bar indicates the current position in the code: "Ln 12, Col 26 • Spaces: 2 History".

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Short Class Software Engineering
by @myskill.id

