BeginCodeLab

BeginCode Lab User Guide

Welcome to **BeginCode Lab** 👋
This guide explains **how to write and use BeginCode Lab** using the online compiler.

You do not need to know programming beforehand. Just focus on learning logic and writing simple instructions.

1. How BeginCode Lab Works (From a User Perspective)

- You will see a **code editor area** in the online compiler
- You type BeginCode Lab code directly in the editor
- Click the **Run** button ▶
- The output appears in the console area

There is **no file creation**, **no installation**, and **no setup** required.

2. Writing Your First Program

Type the following code in the editor:

```
say "Hello, BeginCode Lab!"
```

Click **Run** ▶

You will see:

```
Hello, BeginCode Lab!
```

3. Printing Output (say)

Use say to display text or values.

Syntax

```
say <text or variable>
```

Examples

```
say "Welcome"
set score = 90
say score
```

4. Variables (set)

Variables store values like numbers or text.

Syntax

```
set variable = value
```

Examples

```
set age = 15
set name = "Alex"
```

5. Taking Input (ask)

Use ask to take input from the user.

Syntax

```
ask "Question" -> variable
```

Example

```
ask "Enter your age:" -> age
say age
```

6. Making Decisions (`if` / `else`)

Use `if` and `else` to make decisions.

Syntax

```
if condition:
    statements
else:
    statements
```

Example

```
ask "Enter marks:" -> marks

if marks >= 50:
    say "Pass"
else:
    say "Fail"
```

⚠️ **Indentation is important**. Use 4 spaces before statements inside `if` or `else`.

7. Repeating Code (Loops)

7.1 Counting Up

```
start i = 1 until i <= 5 increase i:
    say i
```

7.2 Counting Down

```
start i = 5 until i >= 1 decrease i:
    say i
```

8. Functions

Functions help you reuse code.

Defining a Function

```
define greet:
    say "Hello"
```

Calling a Function

```
do greet
```

9. Indentation Rules (Very Important)

Correct:

```
if x > 0:
    say "Positive"
```

Wrong:

```
if x > 0:
 say "Positive"
```

Incorrect indentation will cause errors.

10. Complete Example

```
say "Welcome"

ask "Enter your name:" -> name
ask "Enter your score:" -> score

if score >= 50:
    say "Passed"
else:
    say "Failed"

start i = 1 until i <= 3 increase i:
    say i

define bye:
    say "Goodbye"

do bye
```


11. Common Tips

✅ Use quotes for text ❌ Don't forget : after if, loops, and define ✅ Keep indentation consistent (4 spaces)

🎉 **You are now ready to use BeginCode Lab!**
Practice by writing small programs and experimenting in the editor.