

1. What is a variable?

-“A variable is a container in a program used to **store data temporarily**. In C#, every variable has a **data type**, which determines what kind of value it can store, such as an integer, decimal number, character etc”.

Example

```
int age = 18;
```

```
string name = "Amin";
```

Here, **age** and **name** are variables. The variable **age** stores the number **18**, while **name** stores the text **"Amin"**.

Why are variables necessary in a program?

-“Variables are necessary because programs need to store information and use it while they are running.

How do variables allow a program to store and manipulate data?

-“A variable stores a value in the computer’s memory, and the program can access or change that value whenever needed”.

For example:

```
int number = 10;
```

```
number = number + 5;
```

```
Console.WriteLine(number);
```

The variable **number** first stores **10**, then its value is changed to **15**. This shows how variables allow programs to **store, update, and manipulate data**.

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