

 visual programming

# Constant



Bachelor of Information Systems  
Institut Teknologi Del



# Learning Objective(s)

.....

*This material should address the following question(s).*

- What is a constant?
- How it is different to variable?

# Discussion Point

.....

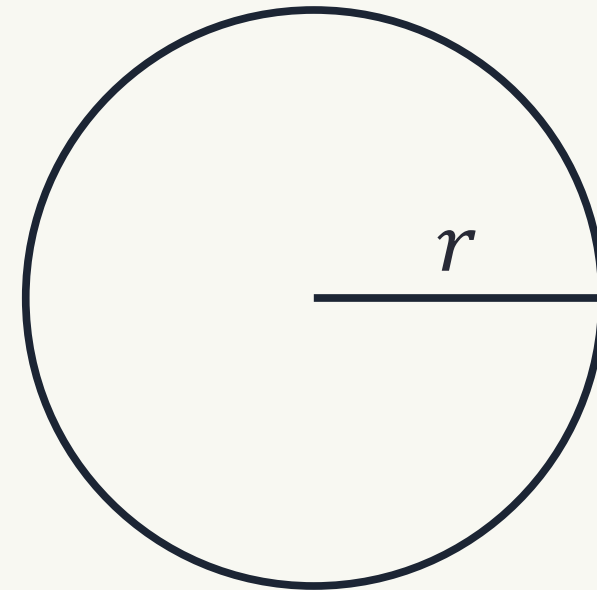
**Constant:**  
The Core Concepts.



# Problem

- In the circle area calculation, we have three values:
  - $\pi$  is a constant, whereas
  - $r$  and  $A$  are variable values, their values may change.

$$A = \pi r^2$$





# Question

What is a **constant**?

# Definition

.....

*A **constant** is a labeled space, similar to variable, but non-modifiable. It is set once and persists forever. Commonly used as default or reference value.*

# Constant

- Like variable, a constant is also uniquely labeled.
  - The label (identifier) has to be unique and meaningful.
  - Should form a noun.
- Writing convention:
  - SNAKE\_CASE in all caps.
- Which of the following identifiers are good?
  - PI, DEFAULT\_GENDER, REMOVE, and SPLIT.

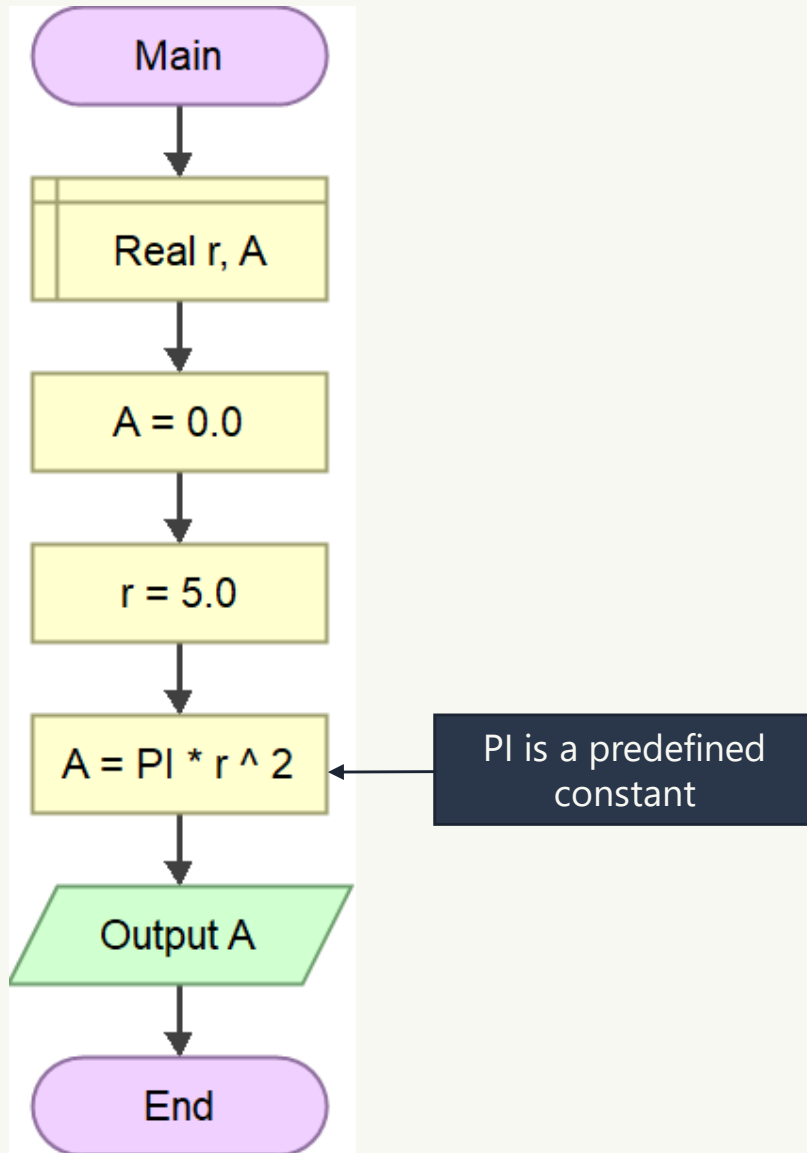


# Constant in Flowgorithm

- Flowgorithm has a handful of predefined constants.
  - `true` for Boolean True,
  - `false` for Boolean False,
  - `PI` ( $\pi$ ) for approximately `3.1415`,
- Unfortunately, it does **not** support user-defined constant.







# Hands On

- In the solution, we declare two variables:
  - $r$  to store the circle's radius.
  - $A$  to store the circle's area.
- To do the calculation, we use  $\text{PI}$  is a predefined constant.

# Final Thoughts.



# Conclusion

.....

1. A constant is a non-modifiable “variable”.
2. Flowgorithm has some predefined constants, but does not support user-defined constant.



# References

.....

*Wassberg, J. (2020). Computer Programming for Absolute Beginners. Packt.*

*Constants – Flowgorithm*

<https://www.flowgorithm.org/documentation/constants.html>



– EOF –



# Course Lecturer

Mario E. S. Simaremare  
Institut Teknologi Del



@simaremare



@dasar-pemrograman



# Supported by

Kementerian Pendidikan, Kebudayaan,  
Riset, dan Teknologi RI

Inovasi Modul Digital 2022

