

Programming Concepts

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

We will learn how to



Learning Objectives

We will learn how to

- ▶ **Write a program in K Turtle**



Learning Objectives

We will learn how to

- ▶ **Write a program in K Turtle**
- ▶ **Use variables to store user input**



Learning Objectives

We will learn how to

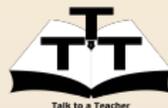
- ▶ **Write a program in K Turtle**
- ▶ **Use variables to store user input**
- ▶ **Use print command to print on canvas**



Learning Objectives

We will learn how to

- ▶ **Write a program in K Turtle**
- ▶ **Use variables to store user input**
- ▶ **Use print command to print on canvas**
- ▶ **Comment a line**



System Requirement



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- ▶ **Ubuntu Linux OS Version 11.10**



System Requirement

- ▶ **Ubuntu Linux OS Version 11.10**
- ▶ **KTurtle version 0.8.1 beta**



Pre-requisites



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- ▶ **Basic working knowledge of K Turtle**



Pre-requisites

- ▶ **Basic working knowledge of K Turtle**
- ▶ **For relevant tutorials, please visit our website**
<http://spoken-tutorial.org>



Sprite



Sprite

- ▶ **Turtle displayed on the canvas is called sprite**



Sprite

- ▶ **Turtle displayed on the canvas is called sprite**
- ▶ **Sprite is a small image that moves around the screen**



Sprite

- ▶ Turtle displayed on the canvas is called sprite
- ▶ Sprite is a small image that moves around the screen
- ▶ Eg: cursor is a sprite



Sprite Commands



Sprite Commands

- ▶ **Spritehide** command hides turtle from canvas



Sprite Commands

- ▶ **Spritehide** command hides turtle from canvas
- ▶ **Spriteshow** command shows turtle if it is hidden



Sprite Commands

- ▶ **Spritehide** command hides turtle from canvas
- ▶ **Spriteshow** command shows turtle if it is hidden
- ▶ **Clear** command cleans all drawings from canvas



Symbols



Symbols

- ▶ **\$ sign is a container of variables**



Symbols

- ▶ **\$ sign is a container of variables**
- ▶ *** is used for multiplication of two numbers**



Symbols

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- ▶ **^ raises the power of a number**



Symbols

- ▶ **\$ sign is a container of variables**
- ▶ *** is used for multiplication of two numbers**
- ▶ **^ raises the power of a number**
- ▶ **# sign comments a line**



Symbols

- ▶ **\$ sign is a container of variables**
- ▶ *** is used for multiplication of two numbers**
- ▶ **^ raises the power of a number**
- ▶ **# sign comments a line**
- ▶ **'sqrt' is an inbuilt function to find square root**



Summary



Summary

We have learnt



Summary

We have learnt

- ▶ **Programming concepts**



Summary

We have learnt

- ▶ **Programming concepts**
- ▶ **Use of `sqrt` function**



Summary

We have learnt

- ▶ **Programming concepts**
- ▶ **Use of `sqrt` function**
- ▶ **Use of `print` command**



Summary

We have learnt

- ▶ **Programming concepts**
- ▶ **Use of `sqrt` function**
- ▶ **Use of `print` command**
- ▶ **Using `KTurtle` editor and canvas**



Assignment



Assignment

Basic programming commands to find



Assignment

Basic programming commands to find

- ▶ **Cube of a number**



Assignment

Basic programming commands to find

- ▶ **Cube of a number**
- ▶ **nth root of a number**



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



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Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Acknowledgements

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- ▶ It is supported by the National Mission on Education through ICT, MHRD, Government of India
- ▶ More information on this Mission is available at <http://spoken-tutorial.org/NMEICT-Intro>

