

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM
DEPARTMENT OF COMPUTER SCIENCE
HAPPY COMPUTING
Dr.B V RAJU KNOWLEDGE CENTER - KUMUDHAVALLI
(01-05-2024 to 04-05-2024)

Code.org® is an education innovation nonprofit dedicated to the vision that every student in every school has the opportunity to learn computer science as part of their core K-12 education. We expand access to computer science in schools, with a focus on increasing participation by young women and students from other underrepresented groups. Code.org is supported by generous donors including Microsoft, Amazon, Google and many others.

URL: <https://studio.code.org>

COURSE-A

Course A offers a computer science curriculum for beginning readers, including Kindergarten students. Students will learn to program using commands like loops and events. The lessons featured in this course also teach students to meaningfully collaborate with others, investigate different problem-solving techniques, persist in the face of challenging tasks, and learn about internet safety.

COURSE CONTENTS

- Lesson 1: Safety in My Online Neighborhood
- Lesson 2: Learn to Drag and Drop
- Lesson 3: Happy Maps
- Lesson 4: Sequencing with Scrat
- Lesson 5: Programming with Scrat
- Lesson 6: Programming with Rey and BB-8
- Lesson 7: Happy Loops
- Lesson 8: Loops with Scrat
- Lesson 9: Loops with Laurel
- Lesson 10: Ocean Scene with Loops
- Lesson 11: The Big Event Jr.
- Lesson 12: Mini-Project: On the Move with Play Lab
- Lesson 13: End of Course Project

COURSE OVERVIEW

▼ Digital Citizenship

▼ Lesson 1: Safety in My Online Neighborhood



This lesson was originally created by Common Sense Education. [Learn more.](#)


The power of the internet allows students to experience and visit places they might not be able to see in person. But, just like traveling in the real world, it's important to be safe when traveling online. On this virtual field trip, kids can practice staying safe on online adventures.

Unplugged Activity

My Online Neighborhood

▼ Lesson 2: Learn to Drag and Drop

This skill-building lesson will give students an idea of what to expect when they head to the computer lab. It begins with a brief discussion introducing them to computer lab manners, then they will progress into using a computer to complete online puzzles.

 1-12

Skill Building

1

2

3

4

5

6

7

8

9

10

11

12

▼ Sequencing

▼ Lesson 3: Happy Maps

This context-setting lesson brings together teams with a simple task: get the "flurb" to the fruit. Students will practice writing precise instructions as they work to translate instructions into the symbols provided.

Unplugged Activity


Video: Happy Maps - Unplugged Activity

▼ Lesson 4: Sequencing with Scrat

In this skill-building lesson, students will develop sequential algorithms to move a squirrel character from one side of a maze to the acorn at the other side. To do this they will stack code blocks together in a linear sequence.

 1

Video: Programming with Blocks

 2-7

Skill Building

2

3

4

5

6


7

▼ Lesson 5: Programming with Scrat

In this skill-building lesson, students will continue to develop sequential algorithms.

 1

Video: Pair Programming

 2-5

Skill Building

2


3

4

5

 6

Video: Debugging with the Step Button

 7-8


Skill Building

7

8

 9

Challenge

 10-12

Practice





10

11

12

▼ Lesson 6: Programming with Rey and BB-8

In this skill-building lesson, students will use their newfound programming skills in more complicated ways to navigate a tricky course with BB-8.

-  1 Video: Programming with Rey and BB-8
-  2-8 Skill Building
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
-  9 Challenge
-  10-12 Practice
 - 10
 - 11
 - 12

▼ Loops




▼ Lesson 7: Happy Loops

This context-setting lesson revisits Happy Maps. This time, students will use loops to solve bigger, longer puzzles with their code.

This lesson contains no levels.

▼ Lesson 8: Loops with Scrat

In this skill-building lesson, students will practice loops in programming puzzles where the goal is to help the squirrel reach the acorn.

-  1-2 Skill Building
 - 1
 - 2
-  3 Video: Ice Age Loops
-  4-9 Skill Building

4 5 6 7 8 9

 10

Challenge

 11-12

Practice

11 12

▼ Lesson 9: Loops with Laurel

In this skill-building lesson, students continue learning the concept of loops. Here, students use loops to collect treasure in open cave spaces.

 1

Video: The Collector

 2-3

Skill Building

2 3

 4

Video: Using the Repeat Block

 5-10

Skill Building

5 6 7 8 9 10

 11

Challenge

 12-14

Practice


12 13 14

▼ Lesson 10: Ocean Scene with Loops

In this skill-building lesson, students learn to draw images by looping simple sequences of instructions. Here, loops are creating patterns. At the end of this lesson, students will create their own images.

 1

Video: The Artist in Code Studio

 2-4

Skill Building

2 3 4

 5

Video: Loops in Artist

 6-10

Skill Building

6 7 8 9 10

 11

Challenge

 12-13

Practice

12 13

 14

Free Play

▼ Events

▼ Lesson 11: The Big Event Jr.

In this context-setting lesson, the class will experience the concept of events through a game where they move or shout when you press buttons on a giant remote.

Unplugged Activity


The Big Event - Unplugged Activity

▼ Lesson 12: Mini-Project: On the Move with Play Lab

In this mini-project, students will use events in Play Lab and apply all of the coding skills they've learned to create an animated game. It's time to get creative and make a story in the Play Lab!

 1

Video: Introduction to Play Lab

 2

Free Play

 3

Practice

 4-8

Mini-project: Jorge the Dog

4

5

6

7

8

▼ End of Course Project

▼ Lesson 13: End of Course Project

In this project lesson, students apply what they have learned about sequencing and loops with the Artist.



1

Project

Scratch, which is a free computer programming language available at <http://scratch.mit.edu>

With Scratch, people can create a wide variety of interactive media projects—animations, stories, games, and more – and share those projects with others in an online community.

COMPUTATIONAL CONCEPTS

CONCEPT	DESCRIPTION
sequence	Identifying a series of steps for a task
loops	Running the same sequence multiple times
parallelism	Making things happen at the same time
events	One thing causing another thing to happen
conditionals	Making decisions based on conditions
operators	Support for mathematical and logical expressions
data	storing, retrieving, and updating values

B V RAJU COLLEGE
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LIST OF THE STUDENTS

S.No	Name of the Student
1	A.Karuna
2	A.Sai
3	B. Mercy
4	CH.Durga Revathi
5	E.Pranitha Lakshmi
6	E.Charan Teja
7	G.Hasini
8	G.Mahesh
9	K.Maheswari
10	M.Darshan
11	M.Jayanth Kumar
12	M.Jhanavi
13	M.Likitha
14	M.Yogendra
15	P.Harshitha
16	R.Jyothi Sri
17	R.Nandini
18	R.Nitya Sri
19	S.Akhil
20	S.Angel Priya
21	S.Pardiva Durga
22	S.Satya Sai
23	T.Baby Parvathi
24	T.Gowtham Satya Shekar
25	T.Harsha Vardhan
26	T.Sushma
27	V.Dugra Bhavani
28	V.Jaya Sri
29	Y.Kusuma
30	Y.Malathi Sri

ATTENDANCE SHEET

B V RAJU COLLEGE

VISHNUPUR::BHIMAVARAM

DEPARTMENT OF COMPUTER SCIENCE

HAPPY COMPUTING ACTIVITY

ATTENDANCE SHEET

S.No	NAME OF THE STUDENT	DAY-1 (1/5/24)	DAY-2 (2/5/24)	DAY-3 (3/5/24)	DAY-4 (4/5/24)
1	A.KARUNA	P	P	P	P
2	A.SAI	P	P	P	P
3	B.MERCY	P	P	P	P
4	CH.DURGA REVATHI	P	P	P	P
5	CH.PRANITHA LAKSHMI	P	P	P	P
6	E.CHARAN TEJA	P	P	P	P
7	G.HASINI	P	P	P	P
8	G.MAHESH	P	P	P	P
9	K.MAHESWARI	P	P	P	P
10	M.DARSHAN	P	P	P	P
11	M.JAYANTH KUMAR	P	P	P	P
12	M.JHANAVI	P	P	P	P
13	M.LIKITHA	P	P	P	P
14	M.YOGENDRA	P	P	P	P
15	P.HARSHITHA	P	P	P	P
16	R.JYOTHI SRI	P	P	P	P
17	R.NANDINI	P	P	P	P
18	R.NITYA SRI	P	P	P	P
19	S.AKHIL	P	P	P	P
20	S.ANGEL PRIYA	P	P	P	P
21	S.PARDIVA DURGA	P	P	P	P
22	S.SATYA SAI	P	P	P	P
23	T.BABY PARVATHI	P	P	P	P
24	T.GOWTHAM SATYA SHEKAR	P	P	P	P
25	T.HARSHA VARDHAN	P	P	P	P
26	T.SUSHMA	P	P	P	P
27	V.DURGA BHAVANI	P	P	P	P
28	V.JAYA SRI	P	P	P	P
29	Y.KUSUMA	P	P	P	P
30	Y.MALATHI SRI	P	P	P	P


Signature of the HOD

Head of the Department
Dept. of Computer Science
B.V. Raju College, BHIMAVARAM-2.

STUDENTS LEARNING & PRACTICING PHOTOS



COURSE COMPLETE CERTIFICATES PERSENTATION PHOTOS

