

# Girls Code Club DeBUGging

(but not with actual bugs)





## March!

We're beginning our session with a discussion about Women's History Month - which is THIS month!







## Milestones for Women in History

## 1848 Women's Rights Convention

The very first!

## 1960 Birth Control

Birth control is commercially accessible to all women, allowing them to choose when and how they want to have a family.

## 1869 Women's Suffrage

Women finally won the right to vote and work in government.

## Present Day Politics, CS, and Sports

Today, we are seeing a lot of "first female Vice President", first woman to earn first place in a particular olympic sport, first woman to do something in computer science







## You could be the next first!

Women's History Month is an annual month that highlights the contributions of women to events in history. It's very much like how we highlight and celebrate amazing women who contribute to Computer Science every month! History for women is still very NEW, which gives YOU the opportunity to do amazing things.





## **Women in Computer Science**

#### So far we've met:

- Ada Lovelace
- Grace Hopper
- Margaret Hamilton
- Hedy Lamarr
- Carol Shaw
- Anita Borg \*\*

This month we're learning about **The ENIAC** Women!





## Remembering Anita Borg





## **Computer Science**

She was an American Computer Scientist



### **Founded**

The Institute for Women in Technology!!!



### **Also Founded**

Grace Hopper celebration for women in technology



## Women Helping Women





### What is debugging?

Every month, you are asked to write code.

Sometimes, the code doesn't work - so myself and the other coaches read through your code and try to find the mistakes. What we are doing is called <a href="DEBUGGING">DEBUGGING</a>! You're finding the creepy crawlies in your code and removing them.









## document.getElementById("idText")



















## var myFavColor = "purple" console.log(MyFavColoor)













This activity is related to debugging AND Women's History Month!













### **Rubber Duck Method**

- Talk about the problem
- Explain your code
- Spell words out loud











https://studio.code.org/s/course1/lessons/5/levels/1









### The ENIAC Women

Six women were hired based on their math skills to program the ENIAC computer. ENIAC stands for Electronic Numerical Integrator and Computer. This was the first successful electronic and digital computer designed to figure out the trajectories of missiles (where they would land) during World War 2. These six women called themselves The First Programmers Club. What is *really cool* is that the majority of these women are from *Philadelphia*, *PA!* 









**Betty Holberton** 

Calculated missile trajectory for the military prior to ENIAC.

**ENIAC Women** 

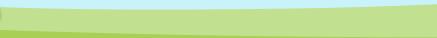
Kathleen Antonelli

Worked with math for the military (from Philly).

**Jean Bartik** 

Became an ENIAC developer right out of college.













Frances Spence

Worked with Antonelli before becoming an ENIAC developer (from PA).

**ENIAC Women** 

**Ruth Tietelbaum** 

Worked with Antonelli and Bartik.

**Marilyn Meltzer** 

 Made weather predictions
 for the military prior to ENIAC (from Philly).





### **Adele Goldstine**

Wrote the first complete technical description of the ENIAC machine. Her husband was involved in the construction of the ENIAC, so she had the intel to document the ins and outs of how the machine worked. She taught math and trained the original six ENIAC developers.



