Operators and Conditionals

With Sanket Singh

Let’s crack Competitive Programming together!

Sanket Singh

- Software Development Engineer @ **LinkedIn**
- Former Software Developer @ **Interviewbit/Scaler**
- Former Product Engineer @ **Coding Blocks**
- Cracked **Google** Summer Of Code 2019 under **Harvard University**
- Offers From **Linkedin, Sprinklr, Dunzo, Works Application(Singapore), Interviewbit, Grofers, Splash Learn**
- **No. 1** Educator in Unacademy Competitive Programming Track
- Former Research Intern @ **ISRO (Indian Space Research Organisation)**
- Taught 7,500+ programmers in Data Structures, Algorithms and Fundamentals of Computer Science
- Got **Rank 1** in Codechef Long Challenges
- Won **Infosys** Digital Make-a-thon

1. If A > B and C < B. Which of the following is the correct option?

A. A <= C
B. A < C
C. A >= C
D. A > C

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C. A >= C
D. A > C

We merge both the conditions and get A > B > C

2. What do you mean by A == B?

A. A assigned to B
B. B assigned to A
C. A and B are equal
D. A and B are not equal

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Refer to relational operators. For assignment, we use single = operator

3. Given two random integer numbers A and B, if B is completely divisible by A, which of the following must be true (B > 0)?

A. A/B == 0
B. B%A == 0
C. A%B == 0
D. B/A == 0

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B. B%A == 0

C. A%B == 0

D. B/A == 0

Take A = 55 and B = 11.

Thus, only B%A == 0 is true.

4. Take two random integer numbers A and B, greater than 0. What is the maximum and minimum value of A%B?

A. A-1 and B-1
B. A and 0
C. B and 0
D. B-1 and 0

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Since the numbers are greater than zero, so minimum will not be less than zero but zero, if A is completely divisible by B. We can get maximum B-1 since if the reminder is greater than B-1 we again divide it by B so maximum must be less than B.

5. Take two random integer numbers A and B. For A/B to be equal to A//B, what must be true?

A. Both number must be equal
B. B is must divisible A
C. A is must divisible B
D. B is greater than A

5. Take two random integer numbers A and B. For A/B to be equal to A//B, what must be true?

A. Both numbers must be equal
B. B must be divisible by A
C. A must be divisible by B
D. B is greater than A

A//B gives a floor value of A/B, so the number and its floor value will be equal only when a number is an integer so it means A/B is an integer it means A must be divisible by B.

6. Take two random integer numbers A and B. Which is the correct relation between A and B? (A%B != 0, A > 0 and B > 0)

A. A = A/B*B + A%B
B. A = A//B*B + A%B
C. A = B//A*B + B%A
D. A = A//B*B + B%A

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C. A = B//A*B + B%A
D. A = A//B*B + B%A

7. There are two random integer numbers A and B. If (A - B)%2 == 0 then which of the following is correct?

A. A and B both must be even
B. A and B both are either even or odd
C. A is even and B is odd
D. A is odd and B is even

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D. A is odd and B is even

If one is odd and one is even then A-B is odd, if either both are even or odd both then A-B is even.

8. What is the minimum number of conditional operations that need to be performed for finding the maximum number between 3 numbers a, b, c?

A. 1
B. 2
C. 3
D. 0

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C. 3
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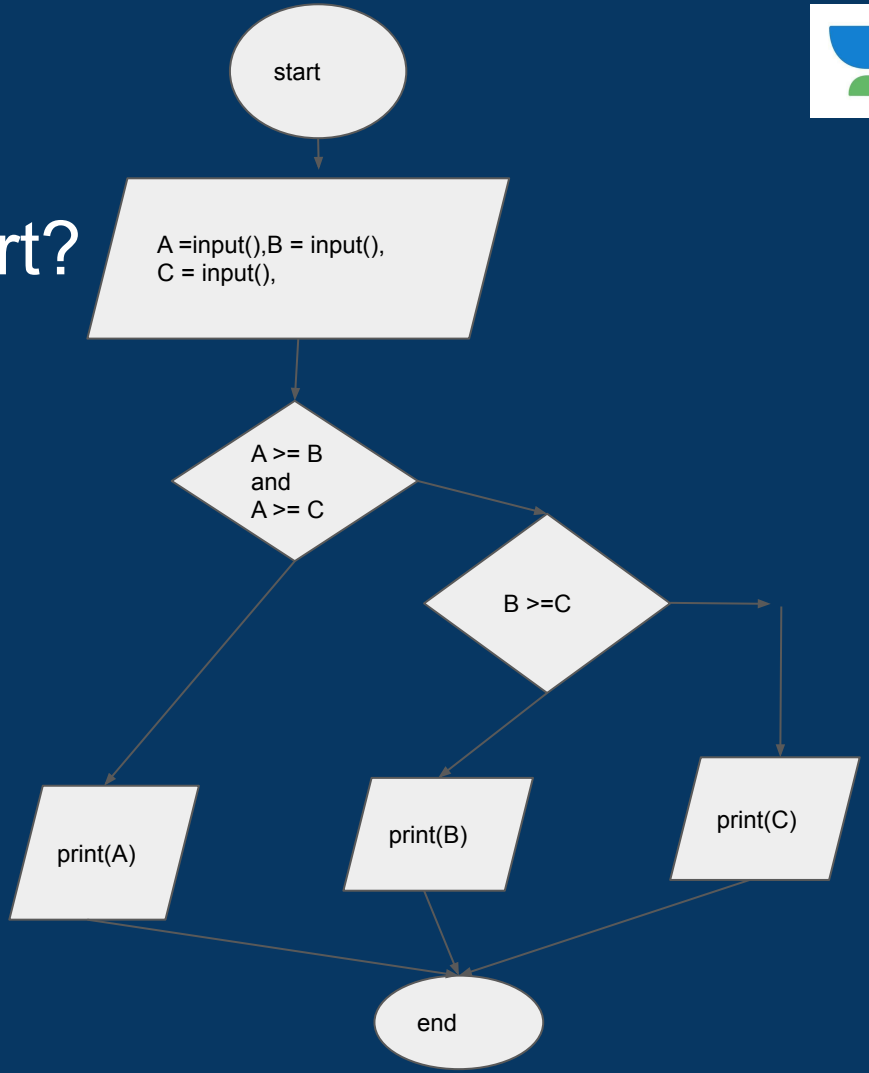
9. Output of the flowchart?

A. min(A, B, C)
B. max(A, B)
C. max(B, C)
D. max(A, B, C)



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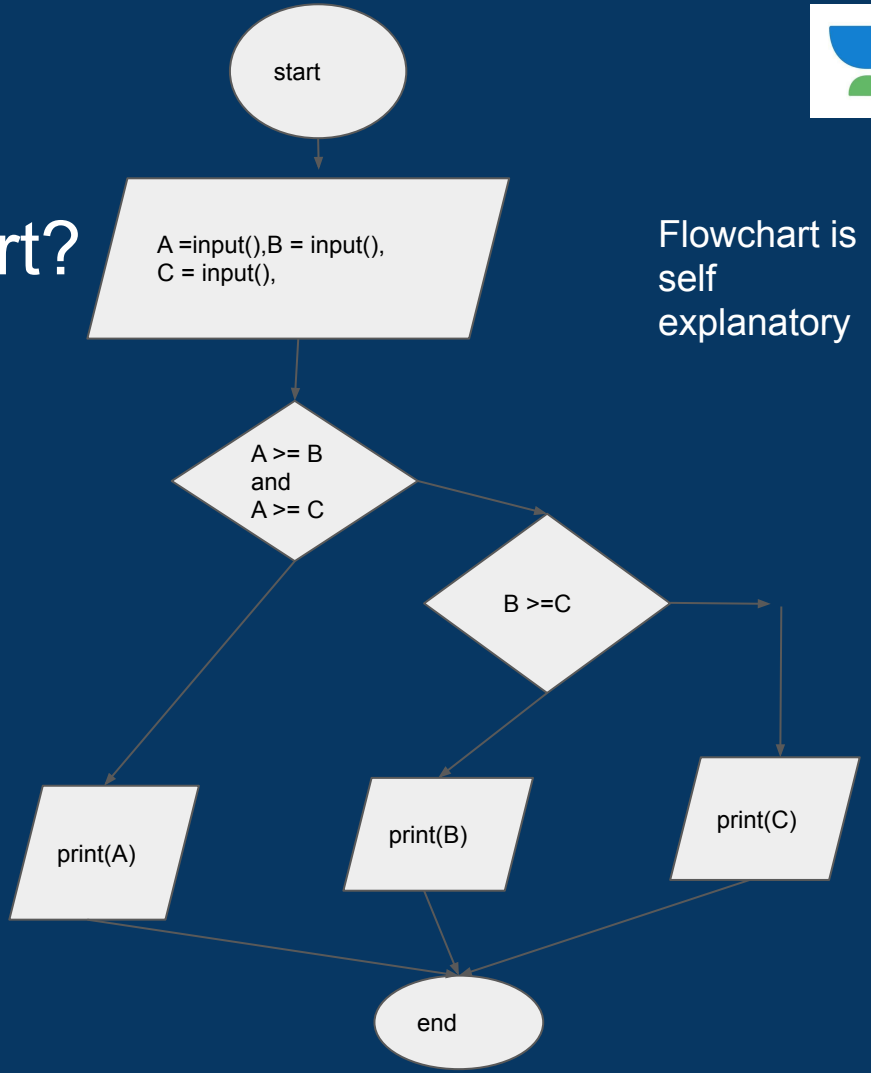
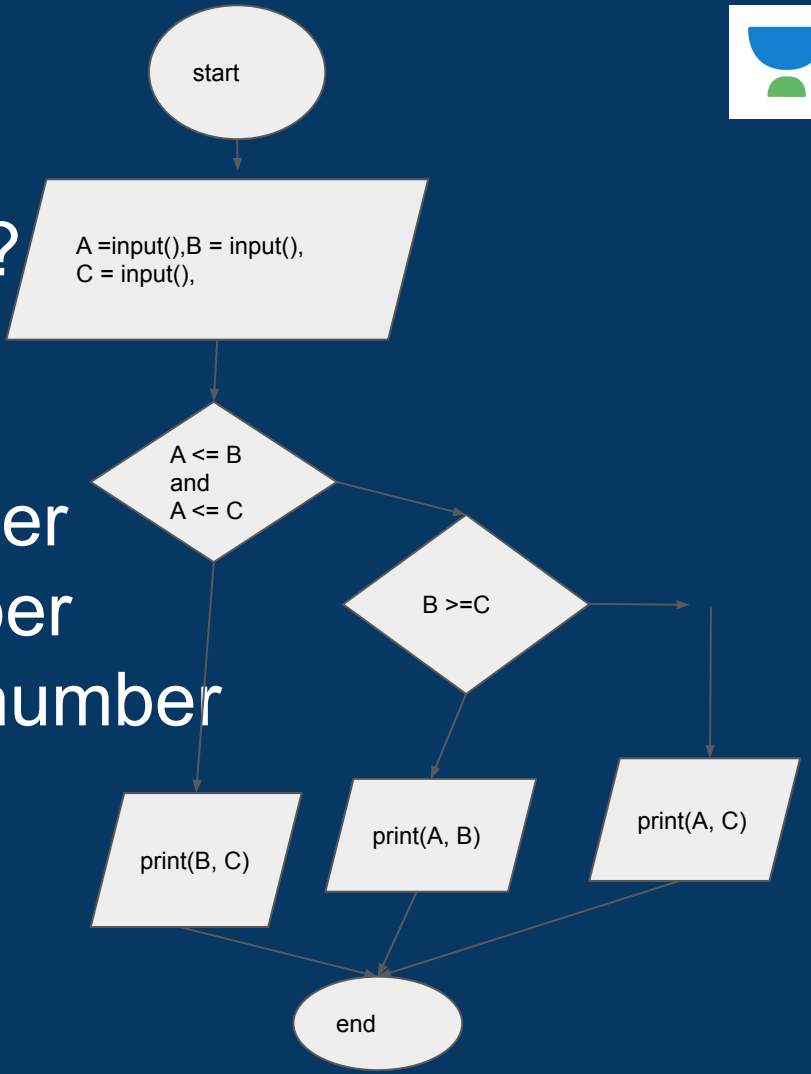


Flowchart is self explanatory

10.Output of the flowchart?

A. First two greatest number
B. First two smallest number
C. Greatest and smallest number
D. None of the above



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