Background Music

Characters

- Narrators
 - o Brown Mamba Explains the sorting algorithm and stuff
 - Paaras
 - o Technical Narrator Runs the Dolphin Jump
 - Shaurya
 - o Prop Guy 1
 - Varalu
 - Attraction Runner
 - Sharon
- (Surfer Boy) Bodhi A stereotypical Surfer Boy, constantly wants to hit the waves, hence the Dolphin jump
 - Aniket
- (Rapper Boy) Brown Mamba Up and coming rapper, rapping for money on the beach, thinks the Dolphin jump will be a good publicity stunt
 - Paaras
- (Dolphin Human) Click Half-Dolphin Half-Man
 - Colin
- (Sandcastle Kid) Broham A guy who likes to build sand castles, and wants to get inspiration, an architecture major
 - Soham
- (Lifeguard) —- The lifeguard, who is way too concerned with everyone's safety
 - o Eun
- (Beach Volleyball) Parav A way too competitive beach volleyball player. Constantly dives for anything, sometimes for no reason
 - Parav
- (Beach Volleyball 2) Tanvi Beach Volleyball player. only doing this cause the other one forced them to
 - o Tanvi
- (The Person with Way Too Many Souvenirs & also Al generated) Mati A person constantly hunting for souvenirs in cool places
 - Mati
- (Karen) Karen
 - Tara
- (Scuba Diver/Marine Biologist) Darya A marine biologist who is researching dolphins.
 Way too obsessed
 - Anagha
- (Corn Oil Salesman) Bob
 - Orlando

- (The Runner)
 - o Anika
- (The Dad) Vincent Only speaks in beatboxing
 - Tanay
- (Person who always takes selfies) Alisha
 - o Alisha

Unsorted Order:

Start

Lifeguard: 6Dolphin: 11Sandcastle: 12Surfer: 14BV1: 9

- Al-Generated: 10

- Runner: 7
- Rapper: 8
- BV2: 13
- Beatbox: 4
- Corn Oil: 5
- Scuba Diver: 1
- Karen: 2

End

Final Sort:

Technical Narrator
Beatboxer (prop guy 1)

Prop guy 2 Brown Mambda

End

Scuba Diver: 1

Karen: 2 Selfie: 3 Beatbox: 4 Corn Oil: 5 Lifeguard: 6 Runner: 7 Rapper: 8 BV1: 9

Al-Generated: 10

Dolphin: 11 Sandcastle: 12

BV2: 13 Surfer: 14 Start

Script

Attraction Runner: Welcome to the Annual Mort City Beach Big Pool Noodle Contest! Are you guys ready?

Everyone: *cheering from pure readiness, except* M.A.T.I.

Surfer boy: Wait, guys, I'm new to this competition, what is this about, my dudes?

Attraction Runner: It's a competition between all of us to see who has the longest pool noodle \All we need now is to sort you guys from longest to shortest pool noodles. Luckily, I have my attendance sheet right here- wait! Where did I keep it?

Technical Narrator: Don't tell me you lost it!

Attraction Runner: Uh, uh, uh-erm... no need to panic, everyone! There's gotta be another way to sort this line, maybe like a sorting algorithm. Anyone got any ideas?

Brown Mamba/With Beatboxer:

Yo, my name is Brown Mamba, and I'm rappin' for money,(money) Out on the beach where it's really sunny, (on sort) Seems like we need to get sorted into a line, I think insertion sort will do us just fine! (on bro)

Prop Guy 1: Insertion sort? What's that?

Brown Mamba:

First step, we take the second element in line, (no cap) Compare it to the first, gotta make it shine.

If it's smaller, we swap it, put it in its place,

Now the first two elements have their own space.

Keep on going till the list is all straight, Every element's in order (grah), ain't that great? It's not the fastest (ay), but it gets the job done, (yuh) Insertion sort, yeah, it's second to none. (none) Technical Narrator: Let's start: *Go to the end of the line* First, Karen over here has a longer pool noodle than Scuba Diver, thus they have to switch. So the scuba diver moves out, and everyone shifts to the right, and then the scuba diver takes their place!

TN: Look at what we have here! Mr. Corn, you have a smaller pool noodle than this beatboxer! So this beatboxer has to insert himself into this position. This results in everyone moving down the right

Beatboxer comes on out, dancing. Everyone slides to the right. Beatboxer then does a little jig into the position of the Corn Oil Salesman

Prop Guy 1 Now that this part of our line is sorted, we can consider this the "sorted subarray". This part of the array has already been sorted, so any passes will skip immediately over this portion of our list.

Scuba Diver: Hmm... this seems like it'll take a long time. How long do you think this will take?

Al Robot: In Big O Notation, it has a time complexity of $O(n^2)$. This means that in the worst case, the time it takes is proportional to the input size squared. Insertion sort has a space complexity of O(1)

Brown Mamba:

So in conclusion, it may not be the fastest, But insertion sort the reason that I rap this, (rap) But wait, it's not over yet, I forgot, With a sorting algorithm, you need multiple passes (yuh)

Prop Guy 1: Correct! Let's make one more pass. As we can see, our beach rapper has a much shorter noodle than this beach volleyball player right here

Rapper

Looking at our pool noodles, there's a fact we can't ignore it My pool noodle's smaller than yours so we ain't sorted Insert yourself into my position and move the line right Then we can be sorted and move forward

Continuing to Rap, the Rapper then slides into the necessary position.

Prop Guy 1: For pass three, we move past our sorted subarray, and come to...

Runner (Currently running in place, talks rather fast): Me! I've got a shorter noodle than you, beach girl! Let me (*Runs to rapper*) Shorter as well! (*Runs to the left of the rapper*) So I go right here. (Everyone moves to the right, making space for the Runner, panting)

Prop Guy 1: We should notice though, that our runner has moved two slots down. This is because they have a shorter noodle than both the rapper and our volleyball player. Thus, they have to move down twice.

Attraction Runner: Next pass, it's MATI

M.A.T.I: As an AI model, I am incapable of moving to a different place. However, by analyzing the data you have given me, I do note that I have to insert myself one slot down. *Everyone moves to the right, MATI does the robot to his new position, while Kraftwerk plays*.

Prop Guy 1: What's up next? Oh the other beach volleyball kid! As you can see, he'll also have to move down.

BV1: RAH, it's time! I have to move down. Look *out to count*. Two ways down! *Does some random dribble moves down.*

Surfer: I don't have to move, so let me handle the next pass. We need the Sandcastle Kid to move down there, since he has a shorter pool noodle. Sandcastle kid looks down the line. He'll have to move not here, but down one more. Everyone moves to the right and waits for the Sandcastle Kid to move in.

Sandcastle Kid: Aw, danggit. *Kicks pails and shovels aside and sad music plays. No one dances. Slouched and head drooping walks between AI and Surfer.* I always have the biggest sandcastles, never the biggest pool noodles. I compete every year and can never get first. *Sits down in the position to wallow in his misery.*

Karen: Now it's onto the...

Click: Half-Dolphin, Half-Man Dolphin noise.

Prop Guy 1: Alright, let's see if you've been listening to us

Click: Alright! Does a swimming motion to the Surfer. Smaller. Does more of a swimming/Dancing motion to the sandcastle kid. Smaller.

Click: Still swimming. Larger! So... Does a "parting the motion of the sea". Everyone after moves to the right, and he slots in.

Attraction Runner: Wonderful job! Now *Turns to the Audience*. It's your turn! If a dolphin can get it, you all certainly can. Are you ready?

IF: No reaction

Attraction Runner: I CAN'T HEAR YOU!!!

Else (and once they respond):

Attraction Runner: Wonderful! Let's go. Hey lifeguard! *Lifeguard waves*.

Let's compare your pool noodles to everyone else's! Do you think it goes here? *Points between surfer and BV2, assuming they say no.* CORRECT! Here? *Points between BV2 and sandcastle assuming they also say no.* Correct again! What about... *Points between Mati and BV1 Audience should again say no.* lastly... *Points between Runner and Corn Oil.* Here? *The audience says yes.* Correct! Now we move this side of the line to the right and insert them right here! Now let's go through the line and wow! Everyone's sorted!

Everyone Cheers.

Attraction Runner: Alright, It's time to decide the winner...

Prop Guy 1: OH NO! There's a shark in the water!!!!

Everyone runs offstage

SCENE

Le fin — Yes, the shark pun Colin rips the fin off his back and holds it up while saying this