**JavaScript Assignment**

1. **Write a function that takes a string as input and returns its length. Demonstrate the function with different test cases.**
2. **What does the charAt() method do in JavaScript?**
3. **Write a program that takes a string and an index as input and returns the character at that index using the charAt() method.**
4. **Explain the purpose of the charCodeAt() method.**
5. **Write a function that takes a string and an index as input and returns the ASCII value of the character at that index using charCodeAt().**
6. **Describe the differences between slice(), substring(), and substr() methods in JavaScript.**
7. **Provide examples demonstrating the usage of each method.**
8. **Write a function that converts a given string to uppercase and another function to convert it to lowercase.**
9. **What is the purpose of the join() method in JavaScript?**
10. **Write a program that demonstrates the usage of the join() method to concatenate array elements into a string.**
11. **Explain the use cases of trimStart() and trimEnd() methods in JavaScript.**
12. **Write a program that takes a string with leading and trailing whitespace and removes them using trimStart() and trimEnd() respectively.**
13. **What do padStart() and padEnd() methods do in JavaScript?**
14. **Write a program that pads a given number with leading zeros using padStart() and another program to pad it with trailing zeros using padEnd().**
15. **Describe the purpose of the repeat() method in JavaScript.**
16. **Write a program that repeats a given string a specified number of times using the repeat() method.**
17. **Explain the functionality of the replace() method in JavaScript.**
18. **Write a program that replaces a specific substring within a string with another substring using the replace() method.**