**Name**

**Advanced Programming in Java**

**Lab Exercise 9/16/2024**

Reference: Lesson 13 in Blue Pelican Java

1. What is the ASCII code for ‘A’?

2. What is the ASCII code for ‘Z’?

3. What is the ASCII code for ‘a’?

4. What is the ASCII code for ‘z’?

5. How many letters are in the English alphabet?

6. What is the ASCII code for the character ‘0’ (this is the number 0 and not the letter O)?

7. What is the ASCII code for the character ‘9’?

8. What does the following code do?

char c;

for (int j = 97; j <= 122; j++)

{

c = (char)(j –32);

System.out.print(c);

}

9. What does the following code do?

String s = “Alfred E. Neuman”;

char ch;

for (int x = 0; x < s.length( ); x++)

{

ch = s.charAt(x);

if ( (ch <= 90) && (ch>=65) )

ch = (char)(ch + 32);

System.out.print(ch);

}

10. Write code that will convert *char a* into a *String*.

11. Write code that will convert *String p* into a character. (*p* consists of just one letter.)

12. Is this legal?

char ch = ‘V’;

String sd = ch;

13. Is this legal?

char ch = ‘V’;

char x = (char)(‘V’ + 56);

14. Is this legal?

char aa = “X”;

15. char k = ‘B’;

System.out.println(k + 3); //What’s printed?

16. char k = ‘B’;

System.out.println( (char)(k + 3) ); //What’s printed?

17. Write code that will insure that an uppercase version of *char boy* is stored in *char cv*.

18. Write code that will insure that a lowercase version of *char boy* is stored in *char cv*.

19. If you have a character called *bv*, what could you do to determine if it’s a digit?

20. If you have a character called *bv*, what could you do to determine if it’s a letter?

21. If you have a character called *bv*, what could you do to determine if it’s an uppercase

character?

22. If you have a character called *bv*, what could you do to determine if it’s either a letter or a digit?

23. If you have a character called *bv*, what could you do to determine if it’s a lowercase

character?

24. Describe what the following code does.

for(int j = 0; j <= 127; j++)

{

char ch = (char)j;

if (Character.isWhitespace(ch) )

System.out.println(j);

}

**Programming Exercises**

1. Write a program that will print out the ASCII table. Your table should be printed in 3 columns.
2. Write a program that will print the Scrabble value of a word entered by the user. Use the following picture as a guide.

alpha

When you have completed these programs, submit your documented source code as well as this sheet with the questions answered.