**A3**

prob 1

Text

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

Text

Description automatically generated

Prob2

Graphical user interface

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

Text

Description automatically generated

1. It requires a minimum of 2 bytes (16 bits) to store 55435
2. it requires 4 bytes (32bits) to store 4294967295.
3. 4294967295 is the max number the program can handle with an input length of 32, Larger numbers exit the program.

Prob3

Text

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

1. &integer[1] – &integer[2] = -4
2. Since each stored int takes up 4 memory locations, we know it is 4 bytes in size.
3. & arrchar[2] – &arrchar[3 = -1
4. A char has a size of 1 byte
5. Sizeof(interger[0]) \* elements in the array

4 \* 7 = 28 bytes for the int array

1. Sizeof(arrchar[0]) \* elements in the array

1 \* 7 = 7 bytes for the char array