

Part 1 :

```
the most frequent letter is s. it appeared 5 times.  
[agentile2@gsuad.gsu.edu@snowball ~]$
```

Part 2:

```
[agentile2@gsuad.gsu.edu@snowball ~]$ vi addressOfScalar.c  
[agentile2@gsuad.gsu.edu@snowball ~]$ cc addressOfScalar.c  
[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
address of charvar = 0x7fff9494cc0f  
address of charvar - 1 = 0x7fff9494cc0e  
address of charvar + 1 = 0x7fff9494cc10  
address of intvar = 0x7fff9494cc08  
address of intvar - 1 = 0x7fff9494cc04  
address of intvar + 1 = 0x7fff9494cc0c  
[agentile2@gsuad.gsu.edu@snowball ~]$
```

Intvar is an integer variable and therefore takes 4 bytes rather than 1.

Part 3:

```
[agentile2@gsuad.gsu.edu@snowball ~]$ cc addressOfArray.c  
[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
numbers = 0x7fffd368f5e0  
numbers[0] = 0x7fffd368f5e0  
numbers[1] = 0x7fffd368f5e4  
numbers[2] = 0x7fffd368f5e8  
numbers[3] = 0x7fffd368f5ec  
numbers[4] = 0x7fffd368f5f0  
sizeof(numbers)= 20  
length(numbers)= 5  
[agentile2@gsuad.gsu.edu@snowball ~]$ >  
address of intvar - 1 = 0x7fff9494cc04
```

The address of the array and the first element are not the same.

The statement is: `printf("length(numbers)=%lu\n", sizeof(numbers)/sizeof(num`