PART 1

1.

```
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ cc getMostFreqChar.c
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ ./a.out test.txt
 This is a list of courses.
 CSC 1010 — COMPUTERS & APPLICATIONS

 The Most frequent letter is 's'. It appeared 8 times.
 [sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ 
```

PART 2

2.

```
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ vi addressOfScalar.c
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ gcc addressOfScalar.c
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ ./a.out
 address of charvar = 0x7fff222dd5af
 address of charvar − 1 = 0x7fff222dd5ae
 address of charvar + 1 = 0x7fff222dd5b0
 address of intvar = 0x7fff222dd5a8
 address of intvar − 1 = 0x7fff222dd5a4
 address of intvar + 1 = 0x7fff222dd5ac
 [sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ 
```

3.

```c
#include <stdio.h>

int main() {
    char charvar = 'a';
    printf("address of charvar = %p\n", (void *)(&charvar));
    printf("address of charvar − 1 = %p\n", (void *)(&charvar − 1));
    printf("address of charvar + 1 = %p\n", (void *)(&charvar + 1));

    int intvar = 1;
    printf("address of intvar = %p\n", (void *)(&intvar));
    printf("address of intvar − 1 = %p\n", (void *)(&intvar − 1));
    printf("address of intvar + 1 = %p\n", (void *)(&intvar + 1));
    return 0;
}
~
```

PART 3

4.

```
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ gcc addressOfArray.c
[[sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$ ./a.out
 numbers = 0x7ffedc716830
 numbers[0] = 0x7ffedc716830
 numbers[1] = 0x7ffedc716834
 numbers[2] = 0x7ffedc716838
 numbers[3] = 0x7ffedc71683c
 numbers[4] = 0x7ffedc716840
 sizeof(numbers)= 20
 length(numbers)= 5
 [sbrahmbhatt3@gsuad.gsu.edu@snowball ~]$
```

5. Yes, both address of the array and address of first element of array are same.