

CSE 1320.002 Exam 2 Solutions

1.

```
#include <stdio.h>

void fun( int &a)
{
    a=a*2;
}

int main(void)
{
    int b=5;
    int *p=&b;
    fun(*p);
    printf("%d\n", *p);
    return 0;
}
```

2.

i	*ptr
2	1
1	3
0	4
-1	4
-2	3
-3	1

3.

```
#include <stdio.h>
#include <string.h>
int main(void)
{
    FILE *fp;
    fp=fopen("names.txt", "r");
    char line[20];
    while ( fgets ( line, sizeof line, fp ) != NULL ) /* read a line */
    {
        if (strcmp(line, "A")>=0 && strcmp(line, "Z")<=0)
            printf("%s\n", line); /* print the line */
    }
    fclose(fp);
    return 0;
}
```

4.

```
#include <stdio.h>
#include <string.h>

struct animal
{
    char animal_name[20];
    char animal_class[20];
}

struct animal animals[3];

int main(void)
{
    strcpy(animals[0].animal_name, "zebra");
    strcpy(animals[0].animal_class, "mammal");
    strcpy(animals[1].animal_name, "shark");
    strcpy(animals[1].animal_class, "fish");
    strcpy(animals[2].animal_name, "vulture");
    strcpy(animals[2].animal_class, "bird");

    for (int i=1; i<3; i++)
    {
        if (strcmp(animals[i].animal_class, "mammal")==0)
        {
            printf("%s\n", animals[i].animal_name);
        }
    }

    return 0;
}
```