Week 1 C Programs

1. Calculator

```
#include <stdio.h>

void add(){
    int a,b;
    printf("Please enter the numbers to add\n");
    scanf("%d,%d",&a,&b);
    printf("The sum of the numbers is %d\n",a+b);
}
void subtract(){
    int a,b;
    printf("Please enter the numbers to be subtracted\n");
    scanf("%d,%d",&a,&b);
    printf("The diff of the numbers is %d\n",a-b);
}
void multiply(){
    int a,b;
    printf("Please enter the numbers to be
            multiplied");
    scanf("%d,%d",&a,&b);
    printf("The product of the numbers is %d\n",a*b);
}
void divide(){
    int a,b;
    printf("Please enter the numbers to be
            divided");
    scanf("%d,%d",&a,&b);
    printf("The quotient of the numbers is %f\n",
                                (float)a/b);
}
```

```
void less()
{   int a,b;
    printf("Please enter the numbers to compare
            less than\n");
    scanf("%d, %d", &a, &b);
    if(a<b){
            printf("The %d is less than %d"
                                    ,a,b);
    } else {
        printf("The %d is not greater than %d"
                                    ,a,b);
    }
}
void great()
{
    int a,b;
    printf("Please enter the number to
            compare greater than\n");
    scanf("%d, %d", &a, &b);
    if(a>b)
        printf("The %d is greater than %d\n"
    else                            ,a,b);
        printf("The %d is not greater than %d\n"
                                    ,a,b);
}
void equal()
{
    int a,b;
    printf("Please enter the number to compare
            to equal");
    scanf("%d, %d", &a, &b);
    if(a==b)
        printf("They are equal\n");
    Else
```

```
        printf("They are not equal");
}
void notequal()
{
        int a,b;
        printf("Please enter the numbs to compare
                to not equal \n");
        scanf("%d,%d",&a,&b);
        if(a!=b)
                printf("The %d is not equal to %d",a,b);
        else
         printf("The %d is equal to %d",a,b);
}
void modulus()
{
        int a,b;
         printf("Enter the numbers to get modulus");
         scanf("%d,%d",&a,&b);
         printf("The modulus of %d and %d is
                %d \n",a,b,a%b);
}
void increment()
{
        int a;
        printf("Please enter number to be
                incremented");
        scanf("%d",&a);
        printf("The incremented number is %d \n"
                                ,++a);
}
int main()
{
        int a=0;
```

```
do {
printf("Please enter your choice\n");
printf("1. Addition ");
printf("2. Subtraction");
printf("3. Multiplication ");
printf("4. Divide ");
printf("5. Less than");
printf("6. Greater than");
printf("7. Equal to ");
printf("8. Not equal");
printf("9. Modulus");
printf("10. Increment");
printf("11. Exit ");
Scanf("%d", &a);
switch(a){
    case 1: add();
        break;
    case 2: subtract();
        break;
    case 3: multiply();
        break;
    case 4: divide(); break;
    case 5: less(); break;
    case 6: great(); break;
    case 7: equal(); break;
    case 8: notequal(); break;
    case 9: modulus(); break;
    case 10: increment(); break;
    case 11; break;
    default: printf("Please enter
            valid input");
} while(a!=11);

return 0;
}
```

2.

```
#include <stdio.h>
float sumaver(int a, int b){
    printf("The sum of the two numbers is
            %.d\n", a+b);
    return (float)(a+b)/2;
}

void printeven(int a, int b){
    printf("The even numbers between %.d
        and %.d is \n", b, a);
    for(int i = b+1; i < a, i++){
        if(i%2 == 0){
            printf("%.d\t", i);
        }
    }
    printf("\n");
}
int main(){
    int a, b, c;
    float avg;
    printf("Enter 3 numbers");
    scanf("%.d, %.d, %.d", &a, &b, &c);
    if(a>b && a>c){
        if(b>c){
            avg = sumaver(a, b);
            printeven(a, b);
        } else {
            avg = sumaver(a, c);
            printeven(a, c);
        }
    } else if(b>c){
        if(a>c){
            avg = sumaver(b, a);
```

```
printeven (b, a);
    } else {
        avg = sumaver (b, c);
        printeven ( b, c);
    }
} else {
    if ( a > b) {
        avg = sumaver ( c, a);
        print ( c, a);
    } else
    {   avg = sumaver ( c, b);
        printeven (c, b);

    }
}
printf (" The average of the two greatest numbers is %f", avg);
return 0;
}
```