Assignment 2

1. Write a program to that accepts a positive integer from user and prints the value in decimal, octal and hexadecimal form.

2. Write a program that assigns the maximum value to an **unsigned short** (typically 2 bytes) and **unsigned int (typically 4 bytes)** to two variables. What is the output when you print one more than the maximum value with **printf** ?

3. Execute the follwing code and answer the questions that follow.

```
#include<stdio.h>
int main(void)
{

    char c = '0'; short s = 0;
    while (c <= '9')
    {
            printf("%c",c);
            c = c+1;
    }

    printf("\n");
    while (s <= 9)
    {
            printf("%hd",s);
            s++;
    }
    return 0;

}
```

(i) What does this program display?
(ii) Is there any differnce between the two lines of output?
(iii) Why was the second **printf** statement provided?
(iv) If both loops performed an additional iteration, what would be the next item to be printed?

4. Write a program that computes and prints the quotient and remainder of a division of two integers that are accepted from the keyboard with **scanf**

5. Write a program that accepts the dimensions of a rectangle as an integer and floating point number and prints the area and perimeter.

6. Write a program that accepts the time as hours, minutes and seconds as 3 integers and prints the total number of seconds.