```
D:\Embedded System\NTI\Embedded C Course\week_3\ass>cat ass_1.c
#include <stdio.h>
#include <stdlib.h>

int main()
{
    int i, sum = 1,n;
    printf("Enter your Num: ");
    scanf("%d", &n);
    for(i = 2; i < n; i++)
    {
        if( n % i == 0)
        {
            sum += i;
            //printf("%d\n",i);
        }
    }
    if(sum == n)
    {
        printf("Perfect Num");
    }
    else
    {
        printf("Not Perfect Num");
    }

    return 0;
}


D:\Embedded System\NTI\Embedded C Course\week_3\ass>a.exe
Enter your Num: 28
Perfect Num
D:\Embedded System\NTI\Embedded C Course\week_3\ass>
```

```
D:\Embedded System\NTI\Embedded C Course\week_3\ass>cat ass_2.c
#include <stdio.h>
#include <stdlib.h>
//#include <math.h>
int pow_Num(int num, int pow)
{
        int i;
        int powNum = 1;
        for(i = 0; i < pow; i++)
        {
                powNum *= num;
        }
        return powNum;
}
int main()
{
    int sum = 0, n, temp;
    printf("Enter your Num: ");
    scanf("%d", &n);
    temp = n;
    while (n > 0)
    {
        sum += pow_Num(n%10,3);
        n /=10;
    }
    if (sum == temp)
    {
        printf("Armstrong");
    }
    else
    {
        printf("Not Armstrong");
    }

    return 0;
}

D:\Embedded System\NTI\Embedded C Course\week_3\ass>a.exe
Enter your Num: 153
Armstrong
D:\Embedded System\NTI\Embedded C Course\week_3\ass>
```

```
D:\Embedded System\NTI\Embedded C Course\week_3\ass>cat ass_3.c
#include <stdio.h>
#include <stdlib.h>

int main()
{
    int i, j,size, count = 0;
    int arr[100];
    printf("Enter size of array: ");
    scanf("%d", &size);
    for(i = 0; i < size; i++)
    {
        printf("Enter num%d: ", i + 1);
        scanf("%d",&arr[i]);
    }
     for(i = 0; i < size; i++)
    {
        for(j = i + 1; j < size; j++)
        {
            if(arr[i] == arr[j])
            {
                count++;
                break;
            }
        }
    }
    printf("count a total number of duplicate elements in an array: %d", count);
    return 0;
}
```