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✧ Course : **C PROGRAMMING**

✧ Course code : **CSA0224**

HOME WORK - 1

WRITE A C PROGRAM TO CALCULATE THE AVERAGE OF A SET OF N NUMBERS PROVIDED BY THE USER.

```
#include <stdio.h>
int main()
{
    int i, n;
    float num,sum=0,average;
    printf("enter the number n :");
    scanf("%d",&n);
    for(i=1; i<=n; i++)
    {
        printf("enter the number %d = ",i);
        scanf("%f",&num);
        sum = sum+num;
    }
    average = sum/n;
    printf("Average = %f",average);
    return 0;
}
```

INPUT : n = 3, num1 = 60, num2 = 65,num4=70

OUTPUT: Average = 65.00

ACCEPT THE HEIGHT OF A PERSON & CATEGORIZE AS
TALLER , DWARF & AVERAGE :

```
#include <stdio.h>
int main()
{
    int height;
    printf("Enter the height of the person : ");
    scanf("%d",&height);
    if (height<=150)
    {
        printf("The person is dwarf");

    }
    else if (height > 150 && height <=169)
    {
        printf(" The person is average");

    }
    else
    {
        printf("The person is taller");

    }
    return 0;
}
```

INPUT : height = 170

OUTPUT : The person is taller

WRITE A C PROGRAM TO COMPUTE THE SUM OF THE SQUARES OF THE FIRST N NATURAL NUMBERS.

```
#include <stdio.h>
int main()
{
    int n,i,sum=0;
    printf(" Give me the n value : ");
    scanf("%d",&n);
    for (i=1; i<=n; i++)
    {
        sum = sum + (i*i);

    }
    printf("Sum of the n numbers = %d\n",sum);
    return 0;
}
```

INPUT : n = 5

OUTPUT : sum of the n numbers = 55

WRITE A PROGRAM TO PRINT THE NUMBERS FROM M
TO N BY SKIPPING K NUMBERS IN BETWEEN:

```
#include <stdio.h>
int main()
{
    int i,n,m,k;

    printf("Enter the M :");
    scanf("%d",&m);

    printf("Enter the N : ");
    scanf("%d",&n);

    printf("Enter the k : ");
    scanf("%d",&k);

    for (i=m; i<=n; i=i+k+1)
    {
        printf("%d",i);

    }
    return 0;
}
```

INPUT : m=1 , n=10 , k=2

OUTPUT : 1 4 7 10

WRITE A PROGRAM TO FIND THE SUM OF ALL MULTIPLIERS OF A GIVEN NUMBER UP TO A SPECIFIED LIMIT :

```
#include <stdio.h>
int main()
{
    int sum=0,i,n,k;
    printf("Enter the n value : ");
    scanf("%d",&n);

    printf(" Enter the value for k : ");
    scanf("%d",&k);

    for (i=k; i<=n; i+=k)
    {
        sum = sum + i;
    }
    printf("Sum of the multiplies = %d\n",sum);

    return 0;
}
```

INPUT : n = 10 , k = 4

OUTPUT : SUM OF THE MULTIPLIES 12