

Assignment - 6.

1. WAP to ~~print~~ to calculate sum of first N natural numbers.

Sol

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

```
int main()
```

```
{ int n, s=0;
```

```
printf("enter value of n:");
```

```
scanf("%d", &n);
```

```
for(int i=1; i<=n; i++)
```

```
{
```

```
    s=s+i;
```

```
printf("the sum of natural number is %d\n", s);
```

```
}
```

```
return 0;
```

```
}
```

2. WAP to ~~print~~ to calculate sum of first natural even numbers.

Sol

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

```
int main()
```

```
{ int n, s=0;
```

```
printf("enter even number value of n:");
```

```
scanf("%d", &n);
```

```
for(int i=2; i<=n; i+=2)
```

```
{
```

```
    s=s+i;
```

```
    printf("the sum is %d\n", s);
```

```
}
```

```
return 0;
```

Sum of odd natural numbers.

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

```
int main()
```

```
{
```

```
int n, s = 0;
```

```
printf("Enter odd value of n:");
```

```
scanf("%d", &n);
```

```
for (int i = 1; i <= n; i += 2)
```

```
{
```

```
s = s + i;
```

```
printf("The sum of odd number is %d\n", s);
```

```
}
```

```
return 0;
```

```
}
```

Q-4 WAP to calculate sum of square of N natural numbers

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

```
int main()
```

```
{ int n, s = 0, sum = 0;
```

```
printf("Enter a number of n:");
```

```
scanf("%d", &n);
```

```
for (int i = 1; i <= n; i++)
```

```
{
```

```
c = i * i
```

```
sum = sum + c;
```

```
printf("The sum of square is %d\n", sum);
```

```
}
```

```
return 0;
```

```
}
```

Q-5 WAP to calculate sum of cube of N Natural no.

Sol

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

```
int main()
```

```
{ int n, s=0, sum=0;
```

```
printf("Enter a number of n: ");
```

```
scanf("%d", &n);
```

```
for(int i=1; i<=n; i++)
```

```
{
```

```
s = i*i*i;
```

```
sum = sum + s;
```

```
printf("The sum of cube is %d \n", sum);
```

```
}
```

```
return 0;
```

```
}
```

Q-6 WAP to calculate factorial of a given no.

&

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

```
int main()
```

```
{
```

```
int fact = 1, n;
```

```
printf("Enter a number ");
```

```
{ scanf("%d", &n);
```

```
for(int i=1; i<=n; i++)
```

```
{ fact = fact * i;
```

```
}
```

```
printf("The factorial of %d is %d\n",  
n, fact);  
return 0;
```

{}

Q7 WAP to count digits in given number

Sol:

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

```
int main()
```

{

```
int n;
```

```
int count = 0;
```

```
printf("Enter a number");
```

```
scanf("%d", &n);
```

```
while(n != 0)
```

{

```
n = n / 10;
```

```
count++;
```

}

```
printf("The number of digits in an  
integer is: %d", count);
```

```
return 0;
```

{}