

Assingment - 6

(1) Write a program to calculate Sum of first N natural numbers.

Ans.

```
int main()
{
    int n, i, S = 0;
    printf("%d", &n); ("enter a number");
    scanf("%d", &n);
    for (i = 1; i <= n; i++) {
        S = S + i;
    }
    printf("%d", S);
}
```

(2) WAP to print Sum of first N even natural numbers.

```
int main()
{
    int n, i, S = 0;
    printf("%d", &n); ("enter a number");
    scanf("%d", &n);
    for (i = 1; i <= n; i++) {
        S = S + 2 * i;
    }
    printf("%d", S);
}
```

(3) WAP to calculate Sum of first N odd natural numbers.

```
int main()
{
    int main n, i, S = 0;
    printf("%d", &n);
    ("enter a number");
    scanf("%d", &n);
}
```



```

for (i = 1 ; i <= n ; i++)
{
    S = S + 2 * i - 1 ;
    printf ("%d", S) ;
}
}

```

(6) WAP to calculate factorial of a number
Ans

```

int main()
{
    int n, i, fact = 1 ;
    printf ("enter value of n\n") ;
    scanf ("%d", &n) ;

```

```

for (i = 2 ; i <= n ; i++)
{

```

```

    fact = fact * i ;
}

```

```

printf ("Factorial of %d is %d", n, fact) ;

```

(7) WAP to Count digit in a given number
Ans

```

int main()
{
    int count = 1, x ;
    printf ("%d", &x) ;
    while (x != 0) {
        x = x / 10 ;
        count ++ ;
    }

```

```

printf ("total digit is %d", count) ;

```

```

}

```


⑧ WAP to check whether a given number is a prime number or not.

Ans

```
int main()
{
    int x, i;
    printf("enter a number");
    scanf("%d", &x);
```

```
for (i = 2; i <= x-1; i++)
```

```
{
    if
```

```
    if (x % i == 0)
```

```
        break;
```

```
}
```

```
if (i == x)
```

```
    printf("prime");
```

```
else
```

```
    printf("not prime");
```

```
    printf("\n");
```

```
}
```

⑩ WAP to reverse a given number

```
int main()
{
    int n, i, remainder, reverse = 0;
```

```
    printf("enter a number\n");
```

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

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

```
{
```

```
    remainder = n % 10;
```

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

```
    reverse = reverse * 10 + remainder;
```

```
}
```



```
printf ("Reverse is %d", reverse);  
}
```

(9) WAP to calculate LCM of two numbers

```
Ans int main()  
{ int a, b, i;  
printf ("enter two numbers \n");  
scanf ("%d %d", &a, &b);  
  
for (i = 1; i <= a * b; i++)  
{  
if (i % a == 0 && i % b == 0)  
{  
break;  
}  
}  
  
printf ("LCM is %d", i);
```

(4) Write a program to Calculate Sum of Squares of first N Natural numbers

```
Ans #include <stdio.h>  
int main()  
{ int n, i, S = 0;  
printf ("%d", n); ("enter a number");  
scanf ("%d", &n);  
for (i = 1; i <= n; i++) {  
S = S + i * i;  
}  
printf ("%d", S);  
}
```

⑤ WAP to Calculate Sum of Cubes of first n natural numb

```
#include <stdio.h>
int main()
{
    int n, i, s = 0;
    printf("enter a number");
    scanf("%d", &n);
```

```
for (i = 1; i <= n; i++)
{
    s = s + i * i * i;
    printf("%d", s);
}
```