

## Assignment-6

①

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

```
int main()
```

```
{ int sum=0, i=0;
```

```
while(1)
```

```
{
```

```
    i++;
```

```
    sum = sum + i;
```

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

```
}
```

```
return 0;
```

```
}
```

② #include <stdio.h>

int main()

{

int sum=0, i=0;

~~while (1)~~

while (1)

{

i++;

if (i%2 == 0)

sum = sum + i;

printf ("%d\n", sum);

}

return 0;

}

```

③ #include <stdio.h>
int main()
{
    int i=0, sum=0;
    while(1)
    {
        i++;
        if(i%2!=0)
        {
            sum = sum + i;
            printf("%d", sum);
        }
        return 0;
    }
    return 0;
}

```

```

④ #include <stdio.h>
int main()
{
    int i, sum=0, n;
    for(i=1; ; i++)
    {
        n = i*i;
        sum = sum + n;
        printf("Sum of square N natural  
number = %d", sum);
    }
    return 0;
}

```

⑤ #include <stdio.h>  
int main()

{ int sum = 0, i, n;

for (i = 1; ; i++)

{

n = i \* i \* i;

sum = sum + n;

printf("Sum of cubes of n natural  
number = %d", sum);

~~return 0;~~

}

return 0;



⑥ ~~#~~ include <stdio.h>  
int main()

```
    int i;  
    int n, fact = 1;  
    printf("Enter a number");  
    scanf("%d", &n);  
    for (i = 1; i <= n; i++)  
    {  
        fact = fact * i;  
    }  
    printf("%d", fact);  
    return 0;
```

⑦ ~~#~~ include <stdio.h>  
int main()

```
    int digit, rem, count = 0;  
    printf("Enter a digit");  
    scanf("%d", &digit);  
    while (digit > 0)  
    {  
        digit /= 10;  
        count++;  
    }  
    printf("%d", count);  
    return 0;
```

```

⑧ #include <stdio.h>
int main()
{
    int n, i;
    printf("Enter a number");
    scanf("%d", &n);
    for (i = 2; i <= n - 1; i++)
    {
        if (n % i == 0)
            break;
    }
    if (i == n)
        printf("prime number");
    else
        printf("Not prime number");
    return 0;
}

```

```

⑨ #include <stdio.h>
int main()
{
    int a, b, c, m, l, cm;
    printf("Enter a number");
    scanf("%d %d", &a, &b);
    if (a > b)
        c = a;
    if (b > a)
        c = b;
}

```

```
for (l=1; l<=a; i++)
```

```
{  
    if (a%i == 0 && b/i == 0)
```

```
        m = i
```

```
}
```

```
lcm =  $\frac{a \times b}{m}$ ;
```

```
printf ("%d", lcm);
```

```
return 0;
```

```
}
```

```
⑩ #include <stdio.h>
```

```
int main()
```

```
{
```

```
    int n;
```

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

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

```
    int rem, sum = 0
```

```
    while (n > 0)
```

```
    {
```

```
        rem = n % 10;
```

```
sum = sum + rem * 1
```

```
        sum = rem + sum * 10;
```

```
        n /= 10
```

```
    }  
    printf ("reverse number = %d", sum);
```