

Assignment 6

① #include <stdio.h>

int main()

{

int n, sum=0, i=1;

printf("Enter a number\n");

scanf("%d", &n);

printf("Sum of first %d natural numbers is\n", n);

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

{

sum = sum + i;

}

printf("%d", sum);

return 0;

}

② #include <stdio.h>

int main()

{

int n, sum=0, i=1;

printf("Enter a number\n");

scanf("%d", &n);

printf("Sum of first %d even natural numbers\n", n);

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

{

~~sum = sum + i;~~ sum = sum + 2 * i;

}


```
printf("%d", sum);
return 0;
}
```

③ #include <stdio.h>

int main()

{

int i, sum = 0, n;

printf("Enter a number\n");

scanf("%d", &n);

printf("Sum of %d odd natural numbers\n", n);

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

{

sum = sum + 2 * i - 1;

}

printf("%d", sum);

return 0;

}

④ #include <stdio.h>

int main()

{

int i = 1, sum = 0, n;

printf("Enter a number\n");

scanf("%d", &n);

printf("Sum of squares of %d natural numbers\n", n);

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

{

sum = sum + (i * i);

}

```
printf("%d", sum);
return 0;
```

}

⑤ #include

int

{

int i = 1

printf

scanf

printf

for (i = 1

{

sum =

}

}

⑥ #include

int

{

int i =

printf

scanf

printf

for (i =

{

fac

}

printf

return

}


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

```
return 0;
```

```
}
```

```
③ #include <stdio.h>
```

```
int main()
```

```
{
```

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

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

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

```
printf("Sum of %d odd natural numbers\n", n);
```

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

```
{
```

```
sum = sum + 2*i - 1;
```

```
}
```

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

```
return 0;
```

```
}
```

```
④ #include <stdio.h>
```

```
int main()
```

```
{
```

```
int i = 1, sum = 0, n;
```

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

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

```
printf("Sum of squares of %d natural numbers\n", n);
```

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

```
{
```

```
sum = sum + (i * i);
```

```
}
```



```
printf("%d", sum);
return 0;
```

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⑤ #include <stdio.h>

```
int main()
{
```

```
int i = 1, sum = 0, n;
```

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

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

```
printf("Sum of cubes of %d natural numbers\n", n);
```

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

```
{
```

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

```
}
```

```
}
```

⑥ #include <stdio.h>

```
int main()
```

```
{
```

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

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

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

```
printf("Factorial of %d is : ");
```

```
for(i = n; i > 0; i--)
```

```
{
```

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

```
}
```

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

```
return 0;
```

g

⑦ #include <stdio.h>

int main()

{

int n, count = 0, a;

printf("Enter a number");

scanf("%d", &n);

printf("Number of digits in %d are ", n);

~~are~~

for (a = n; a > 0; a /= 10);

{

count++;

}

printf("%d", count);

return 0;

}

⑧ #include <stdio.h>

int main()

{

int n, i = 2, count = 0;

printf("Enter a number");

scanf("%d", &n);

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

{

if (n % i == 0)

{

count++;

break;

}

~~if (n == 2 || n == 3)~~
~~printf("%d is prime number\n", n);~~

~~else if (count == 1)~~
~~printf("%d is not a prime number\n", n);~~

~~else~~
~~printf("%d is a prime number", n);~~

~~return 0;~~
~~if (count == 0)~~
~~printf("%d is a prime number~~
~~else~~
~~printf("%d is not a prime~~
~~number", n);~~

Q) #include <stdio.h>

int main()

{

int a, b, c, d, i=1, j=1;

printf("Enter 2 numbers\n");

~~scanf("%d %d", &a, &b);~~

scanf("%d %d", &a, &b);

printf("LCM of %d and %d is ", a, b);

for (; ;)

{

c = a * i;

d = b * j;

if (c == d)

break;

c > d ? j++ : i++;

printf("%d", c);

(10) #include <stdio.h>

int main()

{

int number, a, b, new = 0;

printf("Enter a number\n");

scanf("%d", &number);

printf("Reverse of %d is: ", number);

for(a = n; a > 0; a /= 10)

{

b = a % 10;

new = new * 10 + b;

}

printf("%d", new);

return 0;

}