

Ques 3

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

```
int main()
```

```
{ int n, k = 1;
```

```
printf("Enter the number of rows (n);
```

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

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

```
{
```

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

```
{
```

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

```
k++;
```

```
}
```

```
}
```

```
return 0;
```

```
}
```

Ques 4.

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

```
int main()
```

```
{
```

```
int m1, m2, m3;
```

```
printf("Enter the marks of civ out of 50");
```

```
scanf ("%d", &m1);
```

```
printf("Enter the marks of sec out of 100");
```

```
scanf ("%d", &m2);
```

```
if (m1 <= 50 && m2 <= 100)
```

```
{
```

```
if (m3 = m1 + (m2 / 2);
```

```
if (m3 <= 100 && m3 > 90)
```

```
printf("Grade is S");
```

```

else if (m3 <= 90 && m3 >= 80)
    printf("Grade is A");
else if (m3 <= 80 && m3 >= 70)
    printf("Grade is B");
else if (m3 <= 70 && m3 >= 60)
    printf("Grade is C");
else if (m3 <= 60 && m3 >= 50)
    printf("Grade is D");
else if (m3 <= 50 && m3 >= 40)
    printf("Grade is E");
else if (m3 <= 40 && m3 >= 0)
    printf("Grade is F");

```

```

}
else ("Marks entered are Invalid");
return 0;

```

3

Ans. 5.

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

```
int main()
```

```
{
```

```
int num1, num2, i, j, flag, temp, count = 0;
```

```
printf("Enter the value of nos. ");
```

```
scanf("%d %d", &num1, &num2);
```

```
if (num2 < 2)
```

```
{
```

```
printf("There are no primes upto %d\n", num2);
exit(0);
```

```
}
```

```
printf("Prime numbers are ");
```

```
temp = num1;
```

```
if ( num1 % 2 == 0 )
```

```
num1++;
```

```
}
```

```
for ( i = num1 ; i <= num2 ; i = i + 2 )
```

```
flag = 0
```

```
for ( j = 2 ; j <= i / 2 ; j++ )
```

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

```
flag = 1 ;
```

```
break;
```

```
}
```

```
}
```

```
if ( flag == 0 )
```

```
printf ( "%d \n", i );  
count++;
```

```
}
```

```
}
```

```
printf ( " Numbers of prime Numbers between %d & %d  
= %d \n", temp, num2, count );  
return 0;
```

```
}
```

Ans 6

# include <stdio.h>

int main()

# include <math.h>

{

int z;

float r, h, a, v;

printf("1. Cylinder (m)");

printf("2. Cone (m)");

printf("3. Sphere (m)");

printf("4. Exit (m)");

label: printf("Enter your choice:");

scanf("%d", &c);

if (c == 1)

{

printf("Enter radius and height of cylinder:");

scanf("%f %f", &r, &h);

$a = 2 \times 3.14 \times r \times h + 2 \times 3.14 \times r \times r;$

$v = 3.14 \times r \times r \times h;$

printf("The area and volume of cylinder are %f and %f", a, v);

goto label;

}

else if (c == 2)

{

printf("Enter the radius and height of cone:");

scanf("%f %f", &r, &h);

$a = 3.14 \times r \times (r + \text{sqrt}(r \times r + h \times h));$

$v = (3.14 \times r \times r \times h) / 3;$



```
printf("The area and volume of  
cone are %f and %f\n", a, v);  
goto label;
```

```
3  
else if (c == 3)
```

```
{  
    printf("Enter radius of sphere:");  
    scanf("%f", &r);  
    a =  $4 \times 3.14 \times r \times r$ ;  
    v =  $(4 \times 3.14 \times r \times r \times r) / 3$ ;  
    printf("The area and volume of  
    sphere are %f and %f\n", a, v);  
    goto label;  
}
```

```
3  
else if (c == 4)  
    goto l1;
```

```
else if (c > 4 || c == 0)  
    printf("Invalid choice!");
```

```
l1: return 0;
```

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