

WEEK-2

③

#include <stdio.h>

int main()

{

int n, i, j, count = 0;

printf("Enter the number of rows: ");

scanf("%d", &n);

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

printf("\n");

for (j = 1; j <= i; j++)
{

count++;

printf("%d\t", count);
}

}

return 0;

{

```
(4.) #include <stdio.h>
void main()
{
    int internal-marks, external-marks, x, total-
        marks;
    printf("Enter the CIE and SEE marks
        respectively : ");
    scanf("%d %d", &internal-marks, &external-marks);
    x = (external-marks / 2);
    total-marks = x + internal-marks;
    if (total-marks < 100 && total-marks >= 90)
    {
        printf("Grade is S");
    }
    else if (total-marks < 90 && total-marks >= 80)
    {
        printf("Grade is A");
    }
    else if (total-marks < 80 && total-marks >= 70)
    {
        printf("Grade is B");
    }
    else if (total-marks < 70 && total-marks >= 60)
    {
        printf("Grade is C");
    }
    else if (total-marks < 60 && total-marks >= 40)
    {
        printf("Grade is D");
    }
    else
    {
        printf("Grade is Fail");
    }
}
```



```
⑤. #include <stdio.h>
int main() {
    int low, high, i, flag;
    printf("Enter two numbers : ");
    scanf("%d %d", &low, &high);
    printf("Prime numbers between %d and %d
        are : ", low, high);
    while (low <= high) {
        flag = 0;
        if (low <= 1) {
            ++low;
            continue;
        }
        for (i = 2; i <= low / 2; i++)
            if (low % i == 0) {
                flag = 1;
                break;
            }
        if (flag == 0)
            printf("%d ", low);
        ++low;
    }
    return 0;
}
```

⑥.

#include <stdio.h>

#include <math.h>

int main()

{

float r, h, area, volume;

int opt;

char ch;

const float pi = 3.14;

do {

printf("For which shape do you want to
calculate Area and Volume: \n");printf("\n OPTIONS: \n 1- Cylinder \n 2-
Cone \n 3- Sphere \n");

scanf("%d", &opt);

switch(opt) {

case 1:

printf("\n Enter the radius of
cylinder: ");

scanf("%f", &r);

printf("\n Enter the height of
cylinder: ");

scanf("%f", &h);

area = (2 * pi * r * h) + (2 * pi * r * r);

volume = pi * r * r * h;

printf("\n Area: %f", area);

printf("\n Volume: %f", volume);

break;

case 2:

printf("\n Enter the radius of
Cone: ");

scanf("%f", &r);


```

printf("\nEnter the height of Cone :");
scanf("%f", &h);
area = pi * r * r * (h/3)
area = pi * r * (r + sqrt((h*h + r*r)));
volume = pi * r * r * (h/3);
printf("\n Area : %f", area);
printf("\n Volume : %f", volume);
break;

```

case 3:

```

printf("\nEnter the radius of Sphere:");
scanf("%f", &r);
area = 4 * pi * r * r;
volume = (4/3) * pi * r * r * r;
printf("\n Area : %f", area);
printf("\n Volume : %f", volume);
break;

```

default;

```

printf("Enter a valid option !!");
break;

```

}

```

printf("\n Do you want to repeat the operation Y/N: \n");

```

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scanf("%s", &ch);

```

}

```

while (ch == 'y' || ch == 'Y');

```

```

return 0;

```

}