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③ Write a C program to accept n from user & print rows

1
2 3
4 5 6
7 8 9 10.

→
```
#include <stdio.h>
int main()
{
    int i, j, rows, num = 1;
    printf("Enter the number of rows: ");
    scanf("%d", &rows);

    for(i=1; i<=rows; i++)
    {   for(j=1; j<=i; j++)
        {
            printf("%d", num);
            ++num;
        }
    printf("\n");
    }
return 0;
}
```

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(4) accept CIE marks & SEE marks and print grade.

→

```
#include<stdio.h>
int main()
{
    int cie, see, grade;
    printf("Enter cie and see marks: ");
    scanf("%d %d", &cie, &see);
    grade = cie + (see/2);

    if (grade >= 91)
      { printf("Grade = S"); }
    else if (grade >= 82)
      { printf("Grade = A"); }

    else if (grade >= 73)
      { printf("Grade = B"); }

    else if (grade >= 64)
      { printf("Grade = C"); }

    else if (grade >= 55)
      { printf("Grade = D"); }

    else if (grade >= 46)
      { printf("Grade = E"); }

    else if (grade < 46)
      { printf("Grade = F"); }
    return 0;
}
```

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(5) Print the prime numbers b/w given two integers.

```
#include <stdio.h>
int main ()
{
    int a, b, i, flag, x;
    printf ("Enter two numbers (intervals):");
    scanf ("%d %d", &a, &b);
    printf ("Prime numbers between %d and %d are: ", a, b);
    if (a>b) {
                x = a;
                a = b;
                b = x; }
    while (a<b)
    { flag = 0;

      if (a<=1) {
        a++;
        continue;
      }
      for (i=2; i<=a/2; i++) {
        if (a%i == 0){
          flag = 1;
          break;
        }
      }
      if (flag == 0)
        printf ("%d", a);
      a++;
    }
return 0;
}
```

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⑥. Print area & volume of shapes.

→
```
#include <stdio.h>
#include <math.h>
#define pi 3.14
int main()
{
    int shape, r, h, a, i;
    float area, vol;
    printf("How many shapes you want to access: ");
    scanf("%d", &a);
    for (i= 1; i <= a; i++)
    {
    printf("Choose the shape - ");
    printf("\n1-Cylinder\n2-Cone\n3-Sphere\n");
    scanf("%d", &shape);
    {
      switch (shape)
      {
        case 1:
            printf("Enter radius and height of Cylinder: ");
            scanf("%d%d", &r, &h);
            area = (2*pi*r*h) + (2*pi*r*r);
            vol = pi*r*r*h;
            break;

        case 2:
            printf("Enter radius and height of Cone: ");
            scanf("%d%d", &r, &h);
            area = pi*r*(r+(sqrt((h*h)+(r*r))));
            vol = (pi*r*r*h)/3;
            break;
```

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```
case 3:
    printf("Enter radius of the sphere : ");
    scanf("%d", &r)
    area = 4*pi*r*r;
    vol = (4/3)*pi*r*r;
    break;
}
printf("The area is : %f\n", area);
printf("The volume is : %f\n", vol);
}
}
return 0;
}
```