

C week2a.c > main()

```
1  #include<stdio.h>
2  void main(){
3      int n;
4      printf("enter an integer:\n");
5      scanf("%d",&n);
6      int num = 1;
7      for (int i = 0; i < n; i++)
8      {
9          for (int j = 0; j <= i; j++)
10         {
11             printf("%d\t",num);
12             ++num;
13         }
14         printf("\n");
15     }
16 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

2: C/C++ Compile Run



```
PS E:\jdk8\bin\ooj lab> cd "e:\jdk8\bin\ooj lab"
PS E:\jdk8\bin\ooj lab> cmd /c .\week2a.exe
enter an integer:
6
1
2      3
4      5      6
7      8      9      10
11     12     13     14     15
16     17     18     19     20     21
PS E:\jdk8\bin\ooj lab> 
```

C week2b.c > main()

```
1  #include<stdio.h>
2  #define SUB 6
3  void main(){
4      float cieMark[SUB], seeMark[SUB], cie, see, totMark[SUB];
5      int i,j,k;
6      printf("Enter cie marks out of 50:\n");
7      for ( i = 0; i<SUB; i++){
8          printf("sub%d:",i+1);
9          scanf("%f",&cie);
10         if (cie > 50){
11             printf("enter marks for 50\n");
12             i--;
13         }
14         cieMark[i] = round(cie);
15     }
16     printf("Enter see marks out of 100:\n");
17     for( j = 0; j< SUB; j++){
18         printf("sub%d:", j + 1);
19         scanf("%f", &see);
20         if (see > 100){
21             printf("enter marks for 100\n");
22             j -- 1;
23         }
24         else {
25             seeMark[j] = round(see/2);
26         }
27     }
28     for (k = 0; k < SUB; k++){
29         totMark[k] = cieMark[k] + seeMark[k];
30         printf("for subject %d grade is:\n",k+1);
31         if(totMark[k] >= 90){
32             printf("S\n");
```

C week2b.c > main()

```
26 }
27
28 for (k = 0; k < SUB; k++){
29     totMark[k] = cieMark[k] + seeMark[k];
30     printf("for subject %d grade is:\n",k+1);
31     if(totMark[k] >= 90){
32         printf("S\n");
33     }
34     else if (totMark[k] >= 80){
35         printf("A\n");
36     }
37     else if(totMark[k] >= 70){
38         printf("B\n");
39     }
40     else if(totMark[k] >= 60){
41         printf("C\n");
42     }
43     else if(totMark[k] >= 50){
44         printf("D\n");
45     }
46     else if(totMark[k] >= 40){
47         printf("E\n");
48     }
49     else {
50         printf("F\n");
51     }
52 }
53
54
55 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

2: C/C++ Compile Run



```
PS E:\jdk8\bin\ooj lab> cd "e:\jdk8\bin\ooj lab"
```

```
PS E:\jdk8\bin\ooj lab> cmd /c .\"week2b.exe"
```

```
Enter cie marks out of 50:
```

```
sub1:45
```

```
sub2:34
```

```
sub3:56
```

```
enter marks for 50
```

```
sub3:45
```

```
sub4:21
```

```
sub5:36
```

```
sub6:50
```

```
Enter see marks out of 100:
```

```
sub1:89
```

```
sub2:43
```

```
sub3:49
```

```
sub4:10
```

```
sub5:78
```

```
sub6:69
```

```
for subject 1 grade is:
```

```
S
```

```
for subject 2 grade is:
```

```
B
```

```
for subject 3 grade is:
```

```
B
```

```
for subject 4 grade is:
```

```
F
```

```
for subject 5 grade is:
```

```
B
```

```
for subject 6 grade is:
```

```
A
```

```
PS E:\jdk8\bin\ooj lab> 
```

C week2cc > main()

```
1  #include<stdio.h>
2  void main(){
3      int a, b, num1, num2, i, j;
4      printf("Enter two nos:\n");
5      scanf("%d%d",&num1,&num2);
6      if(num1>num2){
7          a = num2;
8          b = num1;
9      }
10     else{
11         a = num1;
12         b = num2;
13     }
14     if(b < 2){
15         printf("there are no prime nos in this range.\n");
16         exit(0);
17     }
18     printf("prime nos in the range are:\n");
19     for (i = a; i <= b; i++){
20         int flag = 0;
21         for(j = 2; j <= i/2; j++){
22             if (i % j == 0){
23                 flag = 1;
24                 break;
25             }
26         }
27         if (flag == 0 && i != 1 && i != 0){
28             printf("%d",i);
29             printf("\n");
30         }
31     }
32 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

2: C/C++ Compile Run



```
PS E:\jdk8\bin\ooj lab> cd "e:\jdk8\bin\ooj lab"
```

```
PS E:\jdk8\bin\ooj lab> cmd /c .\"week2c.exe"
```

```
Enter two nos:
```

```
0 45
```

```
prime nos in the range are:
```

```
2
```

```
3
```

```
5
```

```
7
```

```
11
```

```
13
```

```
17
```

```
19
```

```
23
```

```
29
```

```
31
```

```
37
```

```
41
```

```
43
```

```
PS E:\jdk8\bin\ooj lab> 
```

C week2d.c > main()

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <math.h>
4  #define pi 3.14
5  int main()
6  {
7      int choice, r, h;
8      float area, volume;
9      printf("Enter shape you want\n");
10     do
11     {
12         printf("\nmenu\n 1:Cylinder\n 2:Cone\n 3:Sphere\n 4:Exit\n");
13         scanf("%d", &choice);
14         switch (choice)
15         {
16             case 1:
17                 printf("Enter radius:\n");
18                 scanf("%d", &r);
19                 printf("Enter height:\n");
20                 scanf("%d", &h);
21                 area = (2 * pi * r * h) + (2 * pi * pow(r, 2));
22                 volume = pi * pow(r, 2) * h;
23                 printf("Area:%f \t\t Volume:%f", area, volume);
24                 break;
25             case 2:
26                 printf("Enter radius:\n");
27                 scanf("%d", &r);
28                 printf("Enter height:\n");
29                 scanf("%d", &h);
30                 area = pi * r * (r + sqrt(pow(h, 2) + pow(r, 2)));
31                 volume = pi * pow(r, 2) * h / 3.0;
32                 printf("Area:%f \t\t Volume:%f", area, volume);
```


C week2d.c > main()

```
21     area = (2 * pi * r * h) + (2 * pi * pow(r, 2));
22     volume = pi * pow(r, 2) * h;
23     printf("Area:%f \t\t Volume:%f", area, volume);
24     break;
25 case 2:
26     printf("Enter radius:\n");
27     scanf("%d", &r);
28     printf("Enter height:\n");
29     scanf("%d", &h);
30     area = pi * r * (r + sqrt(pow(h, 2) + pow(r, 2)));
31     volume = pi * pow(r, 2) * h / 3.0;
32     printf("Area:%f \t\t Volume:%f", area, volume);
33     break;
34 case 3:
35     printf("Enter radius:\n");
36     scanf("%d", &r);
37     area = 4 * pi * pow(r, 2);
38     volume = (4 / 3.0) * (pi * pow(r, 3));
39     printf("Area:%f \t\t Volume:%f", area, volume);
40     break;
41 case 4:
42     printf("Exit\n");
43     break;
44 default:
45     printf("Enter a no. ranging from 1 to 4");
46 }
47 } while (choice != 4);
48 return 0;
49 }
```

2: C/C++ Compile Run

```

menu
1:Cylinder
2:Cone
3:Sphere
4:Exit
1
Enter radius:
3
Enter height:
4
Area:131.880005          Volume:113.040001
menu
1:Cylinder
2:Cone
3:Sphere
4:Exit
2
Enter radius:
3
Enter height:
4
Area:75.360001          Volume:37.680000
menu
1:Cylinder
2:Cone
3:Sphere
4:Exit
3
Enter radius:
3
Area:113.040001          Volume:113.040001
menu
1:Cylinder
2:Cone
3:Sphere
4:Exit
4
Exit
PS E:\jdk8\bin\oof lab>

```