

Decision Making and Branching - if, if...else and nested if...else, if...else if and switch...case

23131-PUC-2024 / Week-03-Decision Making and Branching - if, if...e...

►Assessment-02-Operators and Expressions, Managing Input and Output Operations
►Assessment-03-Decision Making and Branching - if, if...else and nested if...else

Week-03-01-Practice Session-Coding

✓ Done

Week-03-02-Practice Session-Coding

✓ Done

Week-03-03-Practice Session-Coding

✓ Done

Array Applications

Mark as done

Problem solving with Strings

Mark as done

String manipulation functions

Mark as done

►Assessment-02-Operators and Expressions, Managing Input and Output

Jump to...

if...else...
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id
Section nhnhd=68

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b;
5     scanf("%d %d",&a,&b);
6     if (a%10==b%10)
7     {
8         printf("true");
9     }
10    else
11        printf("false");
12    return 0;
13 }
```

Input	Expected	Got
✓ 25 53	false	false ✓
✓ 27 77	true	true ✓

Passed all tests! ✓

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d", &n);
6     if(n%2!=0)
7     {
8         printf("Weird");
9     }
10    else if(n>=2 && n<=5)
11    {
12        printf("Not Weird");
13    }
14    else if(n>=6 && n<=20)
15    {
16        printf("Weird");
17    }
18    else
19    {
20        printf("Not Weird");
21    }
22    return 0;
23 }
```

Input Expected Got

Input	Expected	Got
3	Weird	Weird
24	Not Weird	Not Weird

Passed all tests! ✓

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b,c,x,y,z;
5     scanf("%d %d %d",&a,&b,&c);
6     if(a>b && a>c)
7     {
8         x=a;
9         y=b;
10        z=c;
11    }
12    else if(b>a && b>c)
13    {
14        x=b;
15        y=a;
16        z=c;
17    }
18    else
19    {
20        x=c;
21        y=b;
22        z=a;
23    }
24    if(x*x==y*y+z*z)
25    {
26        printf("yes");
27    }
28    else
29    {
30        printf("no");
31    }
32    return 0;
33 }
34
35
36
37 }
```

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     if(n==3)
7     {
8         printf("Triangle\n");
9     }
10    else if(n==4)
11    {
12        printf("Square or Rectangle\n");
13    }
14    else if(n==5)
15    {
16        printf("Pentagon\n");
17    }
18    else if(n==6)
19    {
20        printf("Hexagon\n");
21    }
22    else if(n==7)
23    {
24        printf("Heptagon\n");
25    }
26    else if(n==8)
27    {
28        printf("Octagon\n");
29    }
30    else if(n==9)
31    {
32        printf("Nonagon\n");
33    }
34    else
35    {
36        printf ("The number of sides is not supported.\n");
37    }
38
39 }
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int y;
5     scanf("%d",&y);
6     if(y%12==8)
7     {
8         printf("Dragon\n");
9     }
10    else if(y%12==9)
11    {
12        printf("Snake");
13    }
14    else if(y%12==10)
15    {
16        printf("Horse");
17    }
18    else if(y%12==11)
19    {
20        printf("Sheep");
21    }
22    else if(y%12==0)
23    {
24        printf("Monkey");
25    }
26    else if(y%12==1)
27    {
28        printf("Rooster");
29    }
30    else if(y%12==2)
31    {
32        printf("Dog");
33    }
34    else if(y%12==3)
```

```

30
31 else if(y%12==2)
32 {
33     printf("Dog");
34 }
35 else if(y%12==3)
36 {
37     printf("Pig");
38 }
39 else if(y%12==4)
40 {
41     printf("Rat");
42 }
43 else if(y%12==5)
44 {
45     printf("Ox");
46 }
47 else if(y%12==6)
48 {
49     printf("Tiger");
50 }
51 else if(y%12==7)
52 {
53     printf("Hare");

```

Input	Expected	Got
✓ 2004	Monkey	Monkey ✓
✓ 2010	Tiger	Tiger ✓

Passed all tests! ✓

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     char r;
5     int c;
6     scanf("%c %d", &r, &c);
7     if(((r=='a'||r=='c'||r=='e'||r=='g')&&(c%2!=0))||((r=='b'||r=='d'||r=='f'||r=='h')&&(c%2==0)))
8     {
9         printf("The square is black.");
10    }
11    else
12    {
13        printf("The square is white.");
14    }
15
16 }
```

Input Expected Got

- ✓ a 1 The square is black. The square is black. ✓
- ✓ d 5 The square is white. The square is white. ✓

Passed all tests! ✓



answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int day,month,year,dayinfeb;
5     scanf("%d %d %d",&day,&month,&year);
6     if((year%4 == 0 && year%100 != 0) || (year%400 == 0))
7     {
8         dayinfeb = 29;
9     }
10    switch(month)
11    {
12        case 1:
13            day = day;
14            break;
15        case 2:
16            day+=31;
17            break;
18        case 3:
19            day+=31+dayinfeb;
20            break;
21        case 4:
22            day+=31+dayinfeb;
23            break;
24        case 5:
25            day+=31+dayinfeb+31+30;
26            break;
27        case 6:
28            day+=31+dayinfeb+31+30+31;
29            break;
30        case 7:
31            day+=31+dayinfeb+31+30+31+30;
32            break;
33        case 8:
34            day+=31+dayinfeb+31+30+31+30+31;
35            break;
36        case 9:
37            day+=31+dayinfeb+31+30+31+30+31;
```

```

30
31     case 7:
32         day+=31+dayinfeb+31+30+31+30;
33         break;
34     case 8:
35         day+=31+dayinfeb+31+30+31+30+31;
36         break;
37     case 9:
38         day+=31+dayinfeb+31+30+31+30+31+31;
39         break;
40     case 10:
41         day+=31+dayinfeb+31+30+31+31+31+31+30;
42         break;
43     case 11:
44         day+=31+dayinfeb+31+30+31+30+31+31+31+30+31;
45         break;
46     case 12:
47         day+=31+dayinfeb+31+30+31+30+31+31+30+31+30;
48         break;
49     }
50     printf("%d",day);
51     return 0;
}

```

Input	Expected	Got
✓ 18 6 2020	170	170 ✓

Passed all tests! ✓

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int s1,s2,area;
5     char shape;
6     scanf("%c\n%d\n%d",&shape,&s1,&s2);
7     switch(shape)
8     {
9         case 'R':
10        area = s1*s2;
11        break;
12        case 'S':
13        area =(s1*s2)/2;
14        break;
15        case 'T':
16        area = s1*s2;
17        break;
18        default:
19        area = 0;
20        break;
21    }
22    printf("%d\n",area);
23    return 0;
24 }
```



Input	Expected	Got
✓ T	200	200 ✓
10		
20		

Input	Expected	Got
✓ T	200	200 ✓
10		
20		

```
2 int main()
3 {
4     int n,i;
5     scanf("%d",&n);
6     i=(n%296)%10;
7     switch(i)
8     {
9         case 0:
10            printf("Sunday");
11            break;
12        case 1:
13            printf("Monday");
14            break;
15        case 2:
16            printf("Tuesday");
17            break;
18        case 3:
19            printf("Wednesday");
20            break;
21        case 4:
22            printf("Thursday");
23            break;
24        case 5:
25            printf("Friday");
26            break;
27        case 6:
28            printf("Saturday");
29            break;
30        case 7:
31            printf("Kryptoday");
32            break;
33        case 8:
34            printf("Coluday");
35            break;
36        case 9:
37            printf("Daxanday");
```

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