

C, C++, DSA in depth

Doubt class assignment 6



Saurabh Shukla (MySirG)

Assi-6
Q.1

$$x = 314 \quad x = 5428 \quad x = 51$$

if ($x > 99 \& \& x < 1000$)

or

if ($x \geq 100 \& \& x \leq 999$)

Q.2

CP

SP

profit

Loss

if ($SP - CP \geq 0$)

{

$P = (SP - CP) / CP * 100 ;$
printf("%f", P);

}
else

{

$L = (CP - SP) / CP * 100 ;$
printf("%f", L);

}

Q. 4

```
char x;
printf("Enter alphabet");
scanf(" %c", &x);
if (x >= 'a' && x <= 'z')
    printf("Lowercase Alphabet");
else if (x >= 'A' && x <= 'Z')
    printf("Uppercase Alphabet");
else
    printf("Not an Alphabet");
```

Q.5

```
int x;  
printf("Enter a number");  
scanf("%d", &x);  
if(x%2==0 && x%3==0)  
    printf("%d is divisible by 2&3", x);  
else  
    printf("%d is not divisible by 2&3", x);
```

Q.6

if ($x \% 7 == 0 \text{ || } x \% 3 == 0$)

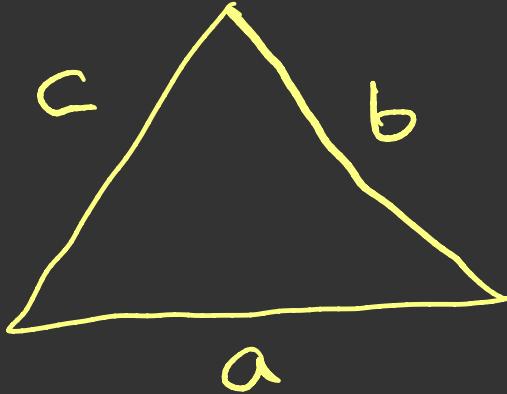
Q. 7

```
int main()
{
    int x;
    printf("Enter a number");
    scanf("%d", &x);
    if (x > 0)
        printf("Positive");
    else if (x < 0)
        printf("Negative");
    else
        printf("zero");
}
```

~~printf(a>0 ? (a==0 ? "positive" : "zero") : "negative");~~

(a>0 ? "Positive" : a<0 ? "Negative" : "zero")

Q.9



$$a + b > c$$

$$a + c > b$$

$$b + c > a$$

$$a = 10 \quad b = 4 \quad c = 3$$



Q.10

$m \leftarrow 1 \text{ to } 12$

if ($m == 1 || m == 3 || m == 5 || m == 7 || m == 8$
 $|| m == 10 || m == 12$)

printf("31 days");

else if ($m == 4 || m == 6 || m == 9 || m == 11$)

printf("30 days");

else printf("28 or 29 days");

1 3 5 7 8 10 12 → 31 days

4 6 9 11 → 30 days

2 → 28 or 29 days

Ass. 5

$$6/2 * 2$$

x

$$3 * 2 \rightarrow 6$$

if($x/2 * 2 == x$)

$$5/2 * 2$$

printf("Even");

$$2 * 2 \rightarrow 4$$

else printf("Odd");

printf("%d %d %d, ++a, a, +r);