

Reasoning

1 → If "APPLE" is coded as "BQQMF"

So ORANGE will be :-
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ P & S & B & O & H & F \end{array}$

⇒ PSBOHF

4 → 4, 9, 16, ?, 36, 49

The missing number will be 25.
 ∴ due to gap of odd number → 5, 7, 9, 11, 13

6 → The color of sky will be "green".

7 → 2, 5, 11, 20, 32, ?

The next number will be "47".

8 → Let total distance be x

then, $t_1 = \frac{x/2}{60} \Rightarrow \frac{x}{120}$

NOTES

$$t_2 = \frac{x/2}{40} \Rightarrow \frac{x}{80}$$

$$\text{Avg speed} = \frac{d}{t} = \frac{d}{t_1 + t_2} \Rightarrow \frac{d}{\frac{d}{120} + \frac{d}{80}} \Rightarrow 48 \text{ km/h}$$

APPLITUDE

9
1 → Price of shirt = 60 ₹

10
 them reduced by 25% means $\{60 \times \frac{25}{100}\}$

11
 $\Rightarrow 15 \underline{\text{₹}}$

12
 so sale price will be $\Rightarrow 60 - 15$
 $\Rightarrow 45 //$

1
2 → Discount = 15%

2
 Cost of book = 20 ₹

3
 Discounted = $20 - \{20 \times \frac{15}{100}\}$

4
 $\Rightarrow 20 - 3 \Rightarrow 17 //$

3 → Profit incrs from 50000 to 60000

6
 The profit is incrt by 20%.

4 → let original price be 100

18 SUNDAY reduced & will be $\Rightarrow 100 - 20 = 80 //$

NOTES

original price = $\frac{100 \times 20000}{80}$

$\Rightarrow 25000 //$

MARCH '18

1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21 22 23 24 25
26 27 28 29 30 31

M T W T F S S M T W T F S S

MONDAY

FEBRUARY

WK 08 • 050-315

19

9 5- Last year population = 20,000

10 and in this year it incrs by 10% means by 2000

11 so population in this year = $20000 + 2000$
 $\Rightarrow \underline{\underline{22000}}$

12 Ans 6 \Rightarrow 80 marks obtained

1 so percentage $\Rightarrow 80 \times \frac{100}{100} \Rightarrow \underline{\underline{80\%}}$

2 Ans 7 50 to 75

3 means increased by 50%.

4 Ans 5 let 200 will be price of any thing.

5 after 30% \Rightarrow 140 Rs.

6 and after 10% \Rightarrow 126

7 total discount = 374.

NOTES

MARCH

APRIL


```
C:\Users\ayush\Documents\first.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug first.cpp

#include<bits/stdc++.h>
using namespace std;
int main()
{
    int n,temp;
    cout<<"Enter the size of array: ";
    cin>>n;
    int arr[10];
    cout<<"Enter the elements: ";
    for(int i = 0;i < n;i++)
    {
        cin>>arr[i];
    }
    for(int i = 0;i < n;i++)
    {
        for(int j = i+1;j < n;j++)
        {
            if(arr[i] > arr[j])
            {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }

    cout<<"smallest element is: "<<arr[0]<<"\n";
    cout<<"second largest element is: "<<arr[n-2]<<"\n";
    cout<<"largest element is: "<<arr[n-1];
}
```

line: 31 Col: 2 Sel: 0 Lines: 31 Length: 556 Insert Done parsing in 0.016 seconds

32°C Haze Search ENG IN 01:14 24-05-2023

```
C:\Users\ayush\Documents\fi x + v  
Project  
Enter the size of array: 5  
Enter the elements: 10  
9  
2  
4  
8  
smallest element is: 2  
second largest element is: 9  
largest element is: 10  
-----  
Process exited after 9.414 seconds with return value 0  
Press any key to continue . . .
```

```
28 cout<<"second largest element is: "<<arr[n-2]<<"\n";  
29 cout<<"largest element is: "<<arr[n-1];  
30 return 0;  
31
```

```
C:\Users\ayush\Documents\first.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug first.cpp
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main()
4 {
5     int n,i,j;
6     cout<<"Enter the size of array: ";
7     cin>>n;
8     int arr[10];
9     cout<<"Enter the elements: ";
10    for(i = 0;i < n;i++)
11    {
12        cin>>arr[i];
13    }
14    for(i = 0;i < n-1;i++)
15    {
16        for(j = i+1;j < n;j++)
17        {
18            if(arr[i] == arr[j])
19            {
20                for(int k = j;k < n;k++)
21                {
22                    arr[k] = arr[k+1];
23                }
24                n--;
25                j++;
26            }
27        }
28    }
29    cout<<"After removing the duplicate: ";
```

line: 29 Col: 44 Sel: 0 Lines: 35 Length: 548 Insert Done parsing in 0.016 seconds

32°C Haze Search ENG IN 01:41 24-05-2023

```
C:\Users\ayush\Documents\first.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug first.cpp
8 int arr[10];
9 cout<<"Enter the elements: ";
10 for(i = 0; i < n; i++)
11 {
12     cin>>arr[i];
13 }
14 for(i = 0; i < n-1; i++)
15 {
16     for(j = i+1; j < n; j++)
17     {
18         if(arr[i] == arr[j])
19         {
20             for(int k = j; k < n; k++)
21             {
22                 arr[k] = arr[k+1];
23             }
24             n--;
25             j++;
26         }
27     }
28 }
29 cout<<"After removing the duplicate: ";
30 for(i = 0; i < n; i++)
31 {
32     cout<<arr[i];
33 }
34 return 0;
35 }
line: 29 Col: 44 Sel: 0 Lines: 35 Length: 548 Insert Done parsing in 0.016 seconds
32°C Haze
Search
ENG IN 01:41 24-05-2023
```

C:\Users\ayush\Documents\first.cpp - [Executing] - Dev-C++ 5.11

```
C:\Users\ayush\Documents\first.cpp x + v
Enter the size of array: 5
Enter the elements: 2
5
6
2
7
After removing the duplicate: 2567
-----
Process exited after 6.845 seconds with return value 0
Press any key to continue . . . |
```

```
31 {
32     cout<<arr[i];
33 }
34 return 0;
35 }
```

line: 29 Col: 44 Sel: 0 Lines: 35 Length: 548 Insert Done parsing in 0.016 seconds


```
C:\Users\ayush\Documents\first.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug first.cpp
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main() {
4     string str;
5     cout<<"enter a any string you want:";
6     cin>>str;
7     cout<<endl;
8     int count=0;
9     int flag=0;
10    // str=toupper(str);
11    for(int i=0;i<str.length();i++)
12    {
13        if(str[i]== 'A' || str[i]== 'E' || str[i]== 'I' || str[i]== 'O' || str[i]== 'U' || str[i]== 'a' || str[i]== 'e' || str[i]== 'i' || str[i]== 'o' || str[i]== 'u')
14        {
15            count++;
16        }
17        else
18        {
19            flag++;
20        }
21    }
22    cout<<"total vowel in string is"<<count;
23    cout<<endl;
24    cout<<"total no of consonant in string is"<<flag;
25
26    return 0;
27 }
```

C:\Users\ayush\Documents\first.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help

Project

```
enter a any string you want:kawasaki
total vowel in string is=4
total no of consonant in string is=4
-----
Process exited after 7.062 seconds with return value 0
Press any key to continue . . . |
```

```
str[i]=='e' || str[i]=='i' || str
```

```
25
26     return 0;
27 }
```