

- 4) Find the output of the following program.

```
int main()
{
    int n=4,i,j,sum=0;
    int a[][4]={{12,15,16,20},{4,10,2,21},{33,14,23,9},{22,43,54,6}};
    for(i=0;i<n;i++){
        for(j=0;j<n;j++){
            if(i==j)
                sum = sum+a[i][j];
        }
    }
    printf("%d",sum);
    return 0;
}
```

- 5) Find the output of the following program.

```
int main(){
    int n,x,count,i;
    n=68;
    for(x=1;x<=n;x++){
        if(n%x==0)
        {
            for(count=0,i=1;i<=x;i++){
                if(x%i==0)
                    count++;
            }
            if(count==2)
                printf("%d",x);
        }
    }
    return 0;
}
```

- 6) Find the output of the following program.

```
int main(){
    int s[] = {12, 10, 8, 6, 4, 2};
    int f[] = {17, 15, 11, 9, 5, 1};
    int i=0,j=0,t=0;
    for (i = 0; i < 6; i++){
        for(j=t;j<6;j++){
            if (s[j] > f[i]){
                printf ( "%d-%d, ", f[i],s[j]);
                t=j+1;
                break;
            }
        }
    }
    return 0;
}
```

- 7) Find the output of the following program.

```
int compare(int a, int b, int c){
    if(a-b>0 && a-c>0)
        return c;
    else
        if(b-c>0)
            return a;
        else
            return b;
    }
int main(){
    printf("%d", compare(compare(88, 89, 91), compare(90, 41, 17), compare(75, 100, 96)));
    return 0;
}
```

- 8) Find the output of the following program.

```
void doAction(char *str)
{
    if (*str)
    {
        doAction(str+1);
        printf("%c", *str);
    }
}

int main()
{
    char a[] = "zoho";
    doAction(a);
    return 0;
}
```

- 9) Find the output of the following program.

```
int main(){
    int a[10],i=0;
    for(i=0;i<10;i++)
        a[i]=9-i;
    for(i=0;i<10;i++)
        a[i]=a[a[i]];
    for(i=0;i<10;i++)
        printf("%d ",a[i]);
    return 0;
}
```

- 10) Find the output of the following program.

```
int main(){
    char *x = "Zoho123Corp45";
    int result=0,i;
    for(i=0;x[i]!='\0';i++){
        if(x[i]>=48 && x[i]<=57)
            result=result+(x[i]-'0');
    }
    printf("%d",result);
    return 0;
}
```

Part Two:

11) Find the output of the following program.

```
void fun(int b[][3]){
    int i,j;
    for(i=0;i<3;i++){
        for(j=0;j<=i;j++)
            b[i][j]++;
    }
}

int main(){
    int i,j;
    int a[3][3] = {22,67,17,9,32,3,58,45,36};
    fun(a);
    for(i=0;i<3;i++){
        for(j=0;j<3;j++)
            printf("%d ",a[i][j]);
    }
    return 0;
}
```

12) Find the output of the following program.

```
int main(){
    int n,m,i,j,result=0;
    int a[][4]={ {12,15,16,8},{17,10,7,21},{33,14,23,9},{22,43,54,6}};
    n=4;
    for(i=0;i<n;i++){
        result = a[i][i];
        for(j=0;j<n;j++){
            if(i%2==0){
                if(a[i][j]<result)
                    result=a[i][j];
            }
            else if(a[i][j]>result)
                result=a[i][j];
        }
        printf(" %d",result);
    }
    return 0;
}
```