

iNeuron

Course: A job Ready Bootcamp in C++, DSA and IOT

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Assignment no: 8

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Q no 1.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        for(j=1;j<=5;j++){

            j<=i?printf("* "):printf(" ");

        }

        printf("\n\n\n");

    }

    return 0;

}
```

Q no 2.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        for(j=1;j<=5;j++){

            6-i<=j?printf("* "):printf(" ");

        }

        printf("\n\n\n");

    }

}
```

```
    }  
    return 0;  
}
```

Q no 3.

Program

```
#include<stdio.h>  
  
int main(){  
    int i,j;  
    for(i=1;i<=5;i++){  
        for(j=1;j<=5;j++){  
            j<=6-i?printf("* "):printf(" ");  
        }  
        printf("\n\n");  
    }  
    return 0;  
}
```

Q no 4.

Program

```
#include<stdio.h>  
  
int main(){  
    int i,j;  
    for(i=1;i<=5;i++){  
        for(j=1;j<=5;j++){
```

```

        j>=i?printf("* "):printf(" ");
    }

    printf("\n\n\n");
}

return 0;
}

```

Q no 5.

Program

```

#include<stdio.h>

int main(){
    int i,j;

    for(i=1;i<=5;i++){
        for(j=1;j<=9;j++){
            j>=6-i&& j<=4+i?printf("* "):printf(" ");
        }

        printf("\n\n");
    }

    return 0;
}

```

Q no 6.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        for(j=1;j<=9;j++){

            j>=i&& j<=10-i?printf("* "):printf(" ");

        }

        printf("\n\n");

    }

    return 0;

}
```

Q no 7.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        for(j=1;j<=10;j++){

            if(i==1)

                printf("* ");

            else
```

```

        (j<=6-i||j>=5+i)?printf("* "):printf(" ");

    }

    printf("\n\n");

}

return 0;

}

```

Q no 8.

Program

```

#include<stdio.h>

int main(){

    int i,j,a,b=1,c=1;

    for(i=1;i<=4;i++){

        a=1;

        for(j=1;j<=7;j++){

            if(j>=5-i&& j<=3+i)

            {

                if(j==1||j==2||j==3||j==4){

                    printf("%d",a);

                    a++;

                }

                else if(j==5){

                    printf("%d",b);

                    b++;

```

```

        }
        else if(j==6){
            printf("%d",c);
            c++;
        }
        else
            printf("%d",1);
    }
    else
        printf(" ");
}
printf("\n\n");
}
return 0;
}

```

Q no 9.

Program

```

#include<stdio.h>

int main(){
    int i,j,a=3,b=2,z;
    for(i=1;i<=4;i++){
        z=1;
        for(j=1;j<=7;j++){

```

```
if(j>=i){  
    if(j==1||j==2||j==3||j==4){  
        printf("%d",z);  
        z++;  
    }  
    else if(j==5){  
        if(i==1||i==2||i==3)  
            printf("%d",a);  
        a--;  
    }  
    else if(j==6){  
        if(i==1||i==2)  
            printf("%d",b);  
        b--;  
    }  
    else  
        i==1?printf("%d",1):printf(" ");  
}  
else  
    printf(" ");  
}  
printf("\n\n");  
}
```



```
        return 0;
    }
}
```

Q no 10.

Program

```
#include<stdio.h>

int main(){

    int i,j,a=3,b=2;

    for(i=1;i<=4;i++){

        for(j=1;j<=7;j++){

            if(j<=5-i)

                printf("%d ",j);

            else if(j==5)

                i==1||i==2?printf("%d ",a):printf(" ");

            else if(j==6)

                i==1||i==2||i==3?printf("%d ",b):printf(" ");

            else if(j==7)

                printf("%d ",1);

            else

                printf(" ");

        }

        printf("\n\n");

    }

    return 0;
}
```

```
}
```

Q no 11.

Program

```
#include<stdio.h>

int main(){

    int i,j,a,b='A',c='A',d='A';

    for(i=1;i<=5;i++){

        a='A';

        for(j=1;j<=9;j++){

            if(j>=6-i&& j<=4+i){

                if(j==1||j==2||j==3||j==4||j==5){

                    printf("%c  ",a);

                    a++;

                }

                else if(j==6){

                    printf("%c  ",b);

                    b++;

                }

                else if(j==7){

                    printf("%c  ",c);

                    c++;

                }

                else if(j==8){
```

```

        printf("%c  ",d);

        d++;

    }

    else

        printf("%c  ','A');

    }

    else

        printf("  ");

    }

    printf("\n");

}

return 0;

}

```

Q no 12.

Program

```

#include<stdio.h>

int main(){

    int i,j,a='C',b='B',z;

    for(i=1;i<=4;i++){

        z='A';

        for(j=1;j<=7;j++){

            if(j>=i){

                if(j==1||j==2||j==3||j==4){

```

```
        printf("%c ",z);

        z++;

    }

    else if(j==5){

        if(i==1||i==2||i==3)

            printf("%c ",a);

            a--;

    }

    else if(j==6){

        if(i==1||i==2)

            printf("%c ",b);

            b--;

    }

    else

        i==1?printf("%c",'A'):printf(" ");

    }

    else

        printf(" ");

    }

    printf("\n\n");

}

return 0;

}
```

Q no 13.

Program

```
#include<stdio.h>

int main(){

    int i,j,a='F',b='E',c='D',d='C',e='B',z;

    for(i=1;i<=7;i++){

        z='A';

        for(j=1;j<=13;j++){

            if(j<=8-i){

                printf("%c ",z);

                z++;

            }

            else if(j==8)

                i==1||i==2?printf("%c ",a):printf(" ");

            else if(j==9)

                i==1||i==2||i==3?printf("%c ",b):printf(" ");

            else if(j==10)

                if(i==1||i==2||i==3||i==4||i==4)

                    printf("%c ",c);

                else

                    printf(" ");

            else if(j==11)

                if(i==1||i==2||i==3||i==4||i==4||i==5)
```

```

        printf("%c ",d);

    else

        printf(" ");

    else if(j==12)

        if(i==1||i==2||i==3||i==4||i==4||i==5||i==6)

            printf("%c ",e);

        else

            printf(" ");

    else if(j==13)

        printf("%c ','A');

    else

        printf(" ");

    }

    printf("\n\n");

}

return 0;

}

```

Q no 14.

Program

```

#include<stdio.h>

int main(){

    int i,j;

```

```

for(i=1;i<=5;i++){
    if(i==1||i==2||i==5)
        for(j=1;j<=5;j++){
            if(j<=i)
                printf("* ");
        }
    else if(i==3)
        for(j=1;j<=i;j+=2)
            printf("* ");
    else
        for(j=1;j<=i;j+=3)
            printf("* ");
    printf("\n\n");
}

return 0;
}

```

Q no 15.

Program

```

#include<stdio.h>

int main(){
    int i,j;

    for(i=1;i<=5;i++){
        if(i==1||i==2||i==5)

```

```

        for(j=1;j<=5;j++)
            (j>=6-i)?printf("* "):printf(" ");
    else if(i==3)
        for(j=1;j<=5;j++)
            (j==3||j==5)?printf("* "):printf(" ");
    else
        for(j=1;j<=5;j++)
            (j==2||j==5)?printf("* "):printf(" ");
    printf("\n\n");
}
return 0;
}

```

Q no 16.

Program

```

#include<stdio.h>

int main(){
    int i,j;
    for(i=1;i<=5;i++){
        if(i==1)
            for(j=1;j<=9;j++)
                (j>=6-i&& j<=5*i)?printf("*"):printf(" ");
        else if(i==5){
            for(j=1;j<=9;j++)

```



```

        (j>=6-i)?printf(" *"):printf("") ;

    }

    else if(i==2)

        for(j=1;j<=9;j++)

            (j==4||j==6)?printf("* "):printf(" ");

    else if(i==3)

        for(j=1;j<=9;j++)

            (j==3||j==8)?printf("* "):printf(" ");

    else

        for(j=1;j<=9;j++)

            (j==2||j==9)?printf("* "):printf(" ");

    printf("\n\n");

}

return 0;

}

```

Q no 17.

Program

```

#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        if(i==1)

```

```

        for(j=1;j<=9;j++){
            j>=i?printf("* "):printf(" ");
        }
    else if(i==2)
        for(j=1;j<=9;j++){
            j==2||j==8?printf("* "):printf(" ");
        }
    else if(i==3)
        for(j=1;j<=9;j++){
            j==3||j==7?printf("* "):printf(" ");
        }
    else if(i==4)
        for(j=1;j<=9;j++){
            j==4||j==6?printf("* "):printf(" ");
        }
    else
        for(j=1;j<=9;j++){
            j==5?printf("* "):printf(" ");
        }
    printf("\n\n");
}

return 0;
}

```

Q no 18.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=5;i++){

        for(j=1;j<=9;j++)

            j>=6-i&& j<=4+i?printf("* "):printf(" ");

        printf("\n\n");

    }

    for(i=2;i<=5;i++){

        for(j=1;j<=8;j++)

            j>=i&& j<=10-i?printf("* "):printf(" ");

        printf("\n\n");

    }

    return 0;

}
```

Q no 19.

Program

```
#include<stdio.h>

int main(){

    int i,j;

    for(i=1;i<=13;i++){
```

```

if(i==1)
    for(j=1;j<=19;j++){
        if(j>=4-i)
            if(j==8||j==9||j==10||j==11||j==12||j==18||j==19)
                printf(" ");
            else
                printf("*");
        else
            printf(" ");
    }
else if(i==2)
    for(j=1;j<=19;j++){
        if(j>=4-i)
            j==9||j==10||j==11||j==19?printf(" "):printf("*");
        else
            printf(" ");
    }
else if(i==3)
    for(j=1;j<=19;j++){
        if(j>=4-i)
            j==10?printf(" "):printf("*");
        else
            printf(" ");
    }

```

```

    }
else if(i==4)
    for(j=1;j<=19;j++){
        if(j==7||j==14)
            printf(" ");
        else if(j==8)
            printf("M");
        else if(j==9)
            printf("y");
        else if(j==10)
            printf("S");
        else if(j==11)
            printf("i");
        else if(j==12)
            printf("r");
        else if(j==13)
            printf("G");
        else
            printf("*");
    }
else
    for(j=1;j<=19;j++)
        j>=i-3&& j<=23-i?printf("*"):printf(" ");

```

```
printf("\n");
```

```
}
```

```
return 0;
```

```
}
```