DECISION CONTROL STATEMENTS

ASSIGNMENT 3

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Q.wap to check whether a given number is positive or non_positive.

```c
#include<stdio.h>
int main()
{
    int num;
    printf("Enter a number:");
    scanf("%d",&num);
    if (num>0)
    printf("positive");
    else
    printf("negative");
    return 0;
}
```

Q.wap to check whether a given number is divisible by 5 or not.

```c
#include<stdio.h>
int main()
{
```

```c
    int num;

    printf("enter a number:");

    scanf("%d",&num);

    if(num%5==0)

    printf("divisible");

    else

    printf("non_divisible");

    return 0;

}
```

Q.wap to check whether a given number is even or an odd number.

```c
#include<stdio.h>

int main()

{

    int num;

    printf("enter a number:");

    scanf("%d",&num);

    {

        if (num%2==0)
```

```c
        printf("even number");

        else

        printf("odd number");

    }

    return 0;

}
```

Q.wap to find the greatest among three given numbers. Print number once if the greatest number appears two or three times.

```c
#include<stdio.h>

int main()

{

    int a,b,c;

    printf("enter three number:");

    scanf("%d%d%d",&a,&b,&c);

    if(a>b&&a>c)

    printf("%d",a);

    else

    {
```

```c
        if(b>a&&b>c)

        printf("%d",b);

        else

        printf("%d",c);

    }

    return 0;



}
```

```c
#include<stdio.h>

int main()

{

    int a,b,c,d,e;

    printf("enter marks of five digits:");

    scanf("%d%d%d%d%d",&a,&b,&c,&d,&e);

    {
```

```c
        if(a>=33 && b>=33 && c>=33 && d>=33 &&
e>=33)

        printf("passed the examination");

        else

        printf("failed the examination");

    }

    return 0;

}
```

Q.wap to check whether a given alphabet is in uppercase or lowercase.

```c
#include<stdio.h>

int main()

{

    int ch;

    printf("enter a character:");

    scanf("%c",&ch);

    {

    if(ch>='A'&&ch<='Z')
```

```c
        printf("upper case alphabet");

    else if (ch>='a'&&ch<='z')


        printf("lower case alphabet");
}


    return 0;

}
```

Q.wap to check whether a given number is divisible by 3 and divisible by 2.

```c
#include<stdio.h>

int main()

{

    int num;

    printf("enter a number:");
```

```c
    scanf("%d",&num);
    {
        if(num%3==0 && num%2==0)
        printf("divisible");
        else
        printf("not divisible");
    }
}
```

Q.wap check whether a given number is divisible by 7 or divisible by 3.

```c
#include<stdio.h>
int main()
{
    int num;
    printf("enter a number:");
    scanf("%d",&num);
    {
        if(num%7==0 || num%3==0)
        printf("divisible");
```

```c
        else
        printf("not divisible");
    }
    return 0;
}
```

Q.wap to check whether a given number is positive, negative or zero.

```c
#include<stdio.h>
int main()
{
    int num;
    printf("enter a number:");
    scanf("%d",&num);

        if(num>0)
        printf("%d is positive",num);
        else if(num<0)
        printf("%d is negative",num);
        else if(num==0)
```

```c
        printf("%d is zero",num);


    return 0;
}
```

Q.wap to check whether a given character is an alphabet (uppercase),an alphabet(lowercase),a digit or a special character.

```c
#include<stdio.h>

int main()

{

    int ch;

    printf("enter a character:");

    scanf("%c",&ch);

    {

        if(ch>='A'&& ch<='Z')

        printf("upper case alphabet");

        else if(ch>='a' && ch<='z')

        printf("lower case alphabet");

        else if(ch>='0' && ch<='9')
```

```c
            printf("digit");

        else

            printf("special character");

    }

    return 0;

}
```

```c
#include<stdio.h>

int main()

{

    int a,b,c;

    printf("enter three numbers:");

    scanf("%d%d%d",&a,&b,&c);

    {

        if(a+b>c && a+c>b && b+c>a)

        printf("triangle is valid");

        else

        printf("triangle is invalid");
```

```c
    }
    return 0;
}
```

Q.wap to check whether a given year is leap year or not.

```c
#include<stdio.h>

int main(){

    int year;
    printf("Enter a year: ");
    scanf("%d", &year);
    if((year%4==0) && (year%400==0) )
    {
        printf("%d is a leap year", &year);
    } else {
        printf("%d is not a leap year", &year);
    }
    return 0;
}
```