

```
// test else if with number ranges
```

```
#include <stdio.h>
```

```
int main()
```

```
{
    float x;
    puts("Number: ");
    scanf("%f",&x);
    if(x<7)
        puts("less than 7");
    else if(x<20)
        puts("In range: between 7 and 20");
    else if(x<40)
        puts("In range: between 20 and 40");
    else
        puts("Greater than or equal to 40");
    puts("Finished");
    return 0;
}
```

```
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

```
// Student Grade
```

```
#include <stdio.h>
```

```
int main()
```

```
{
    float x;
    puts("score ");
    scanf("%f",&x);
    if(x<60)
        puts("Fail");
    else if(x<70)
        puts("Grade D");
    else if(x<80)
        puts("Grade C");
    else if(x<90)
        puts("Grade B");
    else
        puts("Grade A");
    return 0;
}
```

```
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

```
// sales
```

```
#include <stdio.h>
```

```
int main()
```

```
{
    float sales,salary;
    puts("sales: ");
    scanf("%f",&sales);
    if(sales<1000)
        salary = 500 +0.02*sales;
    else if(sales<5000)
        salary = 500 +0.05*sales;
}
```

```

        else
            salary = 500 +0.07*sales;
        printf("Net salary = %f",salary);
        return 0;
    }
    /// calculator
    #include <stdio.h>
    #include <stdlib.h>
    main()
    {
        float num1,num2;
        char op;
        printf("\nType number operator number:\n");
        scanf("%f %c %f",&num1,&op,&num2);
        if(op == '+')
            printf("sum = %f",num1+num2);
        else if (op == '*')
            printf("Mul = %f",num1*num2);
        else if(op=='/')
            printf("Div = %f",num1/num2);
        else if(op == '-')
            printf("Sub = %f",num1-num2);
        else
            printf("invalid op");
    }
    //////////////////////////////////////
    // check whether it is a number, upper case , lower , special
    #include <stdio.h>
    #include <stdlib.h>
    main()
    {
        char ch;
        puts("Type a character: ");
        scanf("%c",&ch);
        if(ch >=0x30 && ch<=0x39)
            puts("Digit number");
        else if(ch>=0x41 && ch<=0x5A)
            puts("Upper case letter");
        else if(ch>=0x61 && ch<=0x7A)
            puts("Lower case letter");
        else
            puts("Special character");
    }
    // Binary to Decimal
    #include <stdio.h>
    #include <stdlib.h>
    main()
    {
        int b,r,s = 0;
        puts("Type a binary number in 5 digits: ");
    }

```

```
scanf("%d",&b);
r = b%10;
s = s + r*1;
b = b/10;
// first digit
r = b%10;
s = s + r*2;
b = b/10;
// second digit
r = b%10;
s = s + r*4;
b = b/10;
// third digit
r = b%10;
s = s + r*8;
b = b/10;
// fourth digit
s = s + b*16;
printf("decimal equivalent: %d",s);
}
```