

Assignment 2

Q.1 Find the price of item when discount is given (specify different discount based on price)

```
int main(){
    int price = 500;
    float finalprice;
    float discount;
    if(price <= 500){

        discount = price * 0.10;
    }
    else if(price>500 && price<=1000){

        discount = price * 0.20;
    }

    else if(price>1000 && price<2000){

        discount = price * 0.25;
    }

    finalprice = price - discount;
    printf("FinalPrice=%.2f",finalprice);
}
```

2. Write a program to find greatest of three numbers using nested if-else

```
int main(){
    int a= 10 , b=5 , c= 20;
    if(a>b){
        if(a>c){
            printf(" a is greater");
        }
        else{
            printf(" c is greater");
        }
    }
    else
    {
        if(b>c)
        {
            printf("b is greater");
        }

        else{
            printf(" c is greater");
        }
    }
}
```

```
int main(){

    int a= 100 , b= 20;
```

```
char sy = '/';
int result;

if(sy == '+'){

    result = a + b;
    printf("result =%d",result);
}
else if(sy == '-') {

    result = a-b;
    printf("result =%d",result);
}

else if (sy == '*'){

    result = a*b;
    printf("result = %d", result);
}

else if(sy == '/') {

    result = a/b;
    printf("result =%d",result);

}
else if( sy =='%'){

    result = a%b;
    printf("result = %d",result);
}
```

```
}
```

3. Accept two numbers from user and an operator (+,-,/,*,%) based on that perform the desired operations.

```
int main(){

    int a= 100 , b= 20;
    char sy = '/';
    int result;

    if(sy == '+'){

        result = a + b;
        printf("result =%d",result);
    }
    else if(sy == '-'){

        result = a-b;
        printf("result =%d",result);
    }

    else if (sy == '*'){

        result = a*b;
```

```

        printf("result = %d", result);
    }

    else if(sy == '/'){
        result = a/b;
        printf("result =%d",result);

    }
    else if( sy =='%'){

        result = a%b;
        printf("result = %d",result);
    }

}

```

4. Display a menu to the user (like 1.Even Odd 2. Basic salary etc), ask the user to enter his choice,then based on that perform the desired operations.

```

int main(){

    int ch = 2;
    int a=10;
    int basicSalary =5000;
    float ta,hra,ba;
    float totalSalary;

    if (ch ==1){

```

```
if(a%2==0){  
    printf("a is even ");  
}  
else{  
  
    printf("a is odd");  
}  
}
```

```
else if(ch == 2){
```

```
    if(basicSalary<=5000){
```

```
        ba = basicSalary*0.10;  
        ta = basicSalary*0.15;  
        hra = basicSalary*0.20;  
    }
```

```
    else {
```

```
        ba = basicSalary*0.30;  
        ta = basicSalary*0.35;  
        hra = basicSalary*0.40;  
    }
```

```
    totalSalary = basicSalary+ ba+ ta+hra;  
    printf("Total Salary=%.2f",totalSalary);
```

```
}
```

```
else if( ch>=3){
```

```
        printf("Invalid choice");
    }
}
```

//5. Accept the price from user. Ask the user if he is a student (user may say yes or //no). If he is a student and he has purchased more than 500 then discount is 20% //otherwise discount is 10%.But if he is not a student then if he has purchased //more than 600 discount is 15% otherwise there is not discount.

```
int main(){

    float price= 200;
    float discount;
    float finalprice;
    char isStudent = 'N';

    if(isStudent=='Y'){
        if(price>500){
            discount = price*0.20;
        }
        else {

            discount = price *0.10;

        }
    }

    else{
```

```
if (price>600){  
  
    discount = price*0.15;  
  
    }  
    else{  
  
        discount= 0;  
    }  
}  
  
finalprice = price - discount;  
printf("Final price =%.2f",finalprice);  
  
}
```