Q4 Answer

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#include <stdio.h>

int main(){

float CA=10,SE=10,Total;

        // printf("Enter your CA marks:\n");

        // scanf("%f",&CA);

        // printf("Enter your SE marks:\n");

        // scanf("%f",&SE);

Total=CA+SE;

if (Total>=50){  //Check for Passing

        if((CA>=20 && CA<=50) && (SE>=20 && SE<=50))  //CA and SE both Passed
        {
                printf("The student has passed in mathematices with a Total Marks: %.2f \n", Total );
        }

                if ((CA>=20 && CA<=50) && (SE<20 && SE>=0))  //CA Passed but SE Failed
                {
                        printf("Passed in CA but Failed in SE, hence the student has FAILED, although
                        your Total Marks is: %.2f \n", Total);
                }

                if ((CA<20 && CA>=0) && (SE>=20 && SE <= 50))  //CA Failed but SE Passed
                {
                        printf("Failed in CA but Passed in SE, hence the student has FAILED, although
                        your Total Marks is: %.2f \n", Total);
                }

                if (CA>50)  //CA Marks should not exceed 50
                {
                        printf("Hey Fool! Your CA should not exceed 50 Marks!  Your CA was: %.2f \n",
                        CA);
                }

                if (SE>50)  //SE Marks should not exceed 50
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                {
                        printf("\nHey Fool! Your SE should not exceed 50 Marks!  Your SE was: %.2f \n",
                        SE);
                }
        }

else{  //Check for Failing and other Negative Marking


        if (CA<0)  //CA has to be Non-Negative
        {
                printf("Hey Fool Your CA should NOT be a Negative Mark! It was: %.2f \n", CA);
        }

        if (SE<0)  //SE has to be Non-Negative
        {
                printf("Hey Fool Your SE should NOT be a Negative Mark! It was: %.2f \n", SE);
        }

        if (CA>0 && SE>0)  //CA and SE both Positive but Less Than 50. The student fails
        {
                printf("student has failed in mathematices as the Total Mark is Less Than 50 i.e: %.2f
                \n", Total);
        }

        }
        return 0;
}
```