# Task 6

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## Question 1:Write code to accomplish each of the following:

1. Define a structure called part containing int variable partNumber and char array partName with values that may be as long as 25 characters .
2. Use separate statements to declare variable a to be of type Part, array b[10] to be of type Part and variable ptr to be of type pointer to Part.
3. Read a part number and a part name from the key board into the members of variable a.
4. Assign the member values of variable a to element three of array b.
6. Assign the address of array b to the pointer variable ptr.
7. Print the member values of element three of array b, using the variable ptr and the structure pointer operator to refer to the members.

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## Question 2:Provide the definition for each of the following:

1. A structure called address that contains character arrays streetAddress[25], city[20], state[3] and zipCode[6].
2. Structure student that contains arrays firstName[15] and lastName[15] and variable id and variable homeAddress of type struct address from question (1).
3. Create array students[5] of type student from question (2).
4. Write function feedData that read the data from user and store them in the aforementioned array.
5. Write function displayData that print the data from the aforementioned array.
6. Create function search that search for specific student with id.

Question 3: What is the output of the following program fragment (**Note:** trace the code first then check your answer by running the code into your editor)

```
#include <iostream>
  using namespace std;
  struct sec
  {
     int a;
     char b;
  };
  int main()
  {
     struct sec s ={25,50};
     struct sec *ps =( sec * )&s;
     cout << ps->a << ps->b;
     return 0;
  }
////////////////////////////////////////
 #include <iostream>
  using namespace std;
  void main()
  {
     struct student
     {
        int no;
        char name[20];
     };
     student s;
     no = 8;
     cout << no;
  }
```

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Question 4: For those who want challenging problems 🚨⛔🔞😂

1.Try to solve question (2) using pointer offset notation.

*Try your best 😉, Good luck🤝*