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6. Develop a C program to simulate the following contiguous memory allocation Techniques: Worst fit b) Best fit c) First fi

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First Fit

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int frag[10], b[10], f[10], i, j, nb, nf, temp;
    int isalloted[10], allotedb[10];
   printf("\n\tMemory Management Scheme - First Fit");
   printf("\nEnter the number of blocks:");
   scanf("%d", &nb);
   printf("Enter the number of files:");
   scanf("%d", &nf);
   printf("\nEnter the size of the blocks:-\n");
   for (i = 1; i<= nb; i++)
   {
     printf("Block %d:", i);
     scanf("%d", &b[i]);
   }
   printf("Enter the size of the files :-\n");
   for (i = 1; i<= nf; i++)
   {
      printf("File %d:", i);
      scanf("%d", &f[i]);
   }
   for (i = 1; i<= nf; i++)
   {
         temp=-1;
      for (j = 1; j <= nb; j++)
      {
         if (isalloted[j] != 1)
         {
            if(b[j]>=f[i])
            {
                  frag[i]= b[j] - f[i];
                  allotedb[i] = j;
                  temp=j;
                  isalloted[j]=1;
                                    break;
```

```
                                        }

                                }


                        }
                                if (temp==-1)
                                allotedb[i]=-1;

    }
    printf("\nFile_no:\tFile_size :\tBlock_no:\tBlock_size:\tFragement");
    for (i = 1; i<= nf; i++)
    {

          if(allotedb[i]!=-1)
          {

       printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d", i, f[i], allotedb[i], b[allotedb[i]], frag[i]);
    }
    else
    {
          printf("\n%d\t\t%d\t\t", i, f[i]);
          printf(" not allocated\n");
          }
          }

}
```