

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

```
#include <string.h>
```

```
int main() {
```

```
    // Variables to store roll number, name, gender, and height
```

```
    int rollNo;
```

```
    char name[100];
```

```
    char gender;
```

```
    float height;
```

```
    // Read roll number from user
```

```
    printf("Enter roll number: ");
```

```
    scanf("%d", &rollNo);
```

```
    getchar(); // Consume newline character left by scanf
```

```
    // Read name from user
```

```
    printf("Enter name: ");
```

```
    fgets(name, sizeof(name), stdin);
```

```
    name[strcspn(name, "\n")] = '\0'; // Remove newline character from fgets input
```

```
    // Read gender from user
```

```
    printf("Enter gender (M/F): ");
```

```
    scanf(" %c", &gender);
```

```
    // Read height from user
```

```
    printf("Enter height (in meters): ");
```

```
    scanf("%f", &height);
```

```
    // Display size of memory occupied by each variable
```

```
    printf("\nSize of memory occupied:\n");
```

```
    printf("Roll number (int): %lu bytes\n", sizeof(rollNo));
```

```
printf("Name (char[]): %lu bytes\n", sizeof(name));  
printf("Gender (char): %lu bytes\n", sizeof(gender));  
printf("Height (float): %lu bytes\n", sizeof(height));
```

```
return 0;
```

```
}
```

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